# <u>AUTOMATIC IDENTIFICATION TECHNOLOGY V (AIT-V)</u> <u>PERFORMANCE WORK STATEMENT (PWS)</u> - REV 3

1	GENERAL SCOPE	1
1.1	AUTOMATIC IDENTIFICATION TECHNOLOGY ACQUISITION OBJECTIVES	1
1.2	DESCRIPTION AND SPECIFICATION.	1
1.3	AIT-V APPLICATIONS	2
1.4	WORLD WIDE GEOGRAPHIC SUPPORT	2
1.5	RESTRICTION OF HAZARDOUS SUBSTANCES (ROHS)	2
1.6	OFFICIAL HOURS OF OPERATION	2
1.7	ATTACHMENTS	2
2	APPLICABLE DOCUMENTS, DEFINITIONS, AND ACRONYMS	3
2.1	FEDERAL INFORMATION PROCESSING STANDARDS	3
2.2	AMERICAN NATIONAL STANDARDS INSTITUTE	3
2.3	INTERNATIONAL ORGANIZATION FOR STANDARDIZATION	3
2.4	FEDERAL COMMUNICATION COMMISSION REGULATIONS	3
2.5	UID AND IUID POLICY.	3
2.6	DEFINITIONS AND ACRONYMS	3
3	AIT-V SYSTEM REQUIREMENTS	5
3.1	GENERAL.	5
3.2	DEFENSE INFORMATION STANDARDS REGISTRY (DISR) COMPLIANCE	6
3.3	OPERATING ENVIRONMENTS.	6
3.3.1	Electromagnetic Environment.	6
3.3.2 3.3.3	Hazardous Environment	
3.3.4	Testing	7
3.3.5 3.3.6	Spectrum Supportability Compliance	
3.4	ORIGINAL EQUIPMENT MANUFACTURER ENGINEERING CHANGES	
3.5	CONNECTIVITY TO GOVERNMENT-OWNED COMPUTERS	
3.6	AC/DC POWER REQUIREMENTS.	
3.6.1	Power Requirements.	
3.6.2	Power Supplies.	8
3.6.3	Battery-Operated AIT-V Equipment.	
3.7	ACCESSIBILITY.	
3.8	BAR CODE SYMBOLOGIES	
3.9	WARRANTY REQUIREMENTS.	9
3.10	EQUIPMENT DELIVERY REQUIREMENTS.	
3.11	EXPEDITED DELIVERY REQUIREMENTS.	9
3.12	UNIQUE IDENTIFICATION.	10

3.13	IPV6 ENABLED ASSETS.	10
4	EQUIPMENT REQUIREMENTS.	10
4.1	HAND HELD TERMINAL (HHT).	10
4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.1.6 4.1.7 4.1.8 4.1.9	Technical Requirements	11 12 12 12 d.13 ay.13
4.2	BAR CODE SCANNING/IMAGING DEVICES	14
4.2.1 4.2.2 4.2.3 4.2.4	Imager for PC Input – general bar code (Tethered).  Imager for PC Input – general bar code (Bluetooth).  Imager for PC input – IUID label marking.  Imager for PC input – IUID direct part marking.	14 14 14
4.3	BAR CODE LABEL PRINTERS.	
4.3.1 4.3.2 4.3.3 4.3.4	General Requirements.  Technical Requirements.  Portable/Wearable Bar Code Label Printer.  Stationary Bar Code Label Printer.	15 15
4.4	ITEM UNIQUE IDENTIFICATION (IUID) MARKING AND VERIFICATION EQUIPMENT	16
4.4.1 4.4.2 4.4.3	General Requirements.  Laser Marking Equipment.  Consumable Supplies.	16
4.5	VERIFICATION EQUIPMENT	16
4.5.1	Technical Requirements.	16
4.6	RADIO FREQUENCY DATA COMMUNICATION CONFIGURATIONS	17
4.6.1 4.6.2 4.6.3	Technical Requirements.  RF Access Point.  RF Gateway.	17
4.7	TRANSIT CASES	18
4.7.1 4.7.2 4.7.3 4.7.4 4.7.5 4.7.6 4.7.7 4.7.8	Contents.  Inventory List.  Transit Case Color.  Transit Case Survivability.  Human Factor Size, Weight, and Dimension Limitations.  Handles And Clasps.  Identification Plate.  Transit Case Health and Safety Labels.	18 18 18 18 18
4.7.9	Transit Case Configurations.	19
4.7.10	Small Arms Room Transit Case Configuration.	
4.8	SMALL ARMS ROOM KIT TRANSIT CASE CONFIGURATION.	
5	SOFTWARE AND FIRMWARE REQUIREMENTS	21
5.1	BAR CODE LABEL AND FORM DESIGN SOFTWARE	21

SMALL ARMS ROOM MANAGEMENT SOFTWARE	21
FIRMWARE REQUIREMENTS	22
SECURITY	22
SECURITY STANDARDS.	22
DOD INFORMATION ASSURANCE REQUIREMENTS	23
DOD WIRELESS DEVICE SECURITY REQUIREMENTS	23
ARMY WIRELESS DEVICE SECURITY REQUIREMENTS	23
COMMON CRITERIA COMPLIANCE REQUIREMENTS	23
SECURITY CERTIFICATION AND ACCREDITATION SUPPORT	23
SECURITY MAINTENANCE SERVICES.	23
GOVERNMENT EVALUATION	23
PRODUCT SOLUTIONS ON CONTRACT	24
MANAGEMENT	24
PROGRAM MANAGEMENT	24
v c	
CONFIGURATION MANAGEMENT.	27
COMPONENT RETURN AND TRACKING	
	SMALL ARMS ROOM MANAGEMENT SOFTWARE.  FIRMWARE REQUIREMENTS.  SECURITY.  SECURITY STANDARDS.  DOD INFORMATION ASSURANCE REQUIREMENTS.  ARMY WIRELESS DEVICE SECURITY REQUIREMENTS.  ARMY WIRELESS DEVICE SECURITY REQUIREMENTS.  COMMON CRITERIA COMPLIANCE REQUIREMENTS.  SECURITY CERTIFICATION AND ACCREDITATION SUPPORT.  SECURITY MAINTENANCE SERVICES.  GOVERNMENT EVALUATION.  PRODUCT SOLUTIONS ON CONTRACT.  MANAGEMENT.  PROGRAM MANAGEMENT  Points of Contact.  AIT-V Contract Program Manager.  AIT-V MANAGEMENT PLAN.  Integrated Product Teams.  Project Progress Reviews.  Monthly asset management Report.  Contractor Manpower Reporting.  CONFIGURATION MANAGEMENT.  AIT-V Configuration Management Plan.  Changes and Modifications.  Changes to Software.  Notification of Software Changes.  Correction of Safety Hazards or Equipment Malfunctions.  Configuration Audit.  Functional Configuration Audit.  Functional Configuration Audit.  Functional Configuration Audit.  Functional Configuration Audit.  Configuration Audits.  Physical Configuration Audit.  Functional Configuration Audit.  Configuration Audits.  RISK MANAGEMENT.  MONTHLY EQUIPMENT AND SERVICE REPORT.  CONTRACT-LEVEL METRICS.  EQUIPMENT RETURN AND TRACKING.  CUSTOMER SUPPORT.  CHNICAL ASSISTANCE.  TOIl-Free Customer Support Help Desk.  Web Site.  WARRANTY SUPPORT.  WARRANTY SUPPORT.

8.5	WARRANTY REPLACEMENT PARTS	32
8.6	WARRANTY ON-CALL PROCEDURES	32
9	MAINTENANCE	32
9.1	SOFTWARE MAINTENANCE.	32
9.2	PREVENTIVE MAINTENANCE.	32
10	TECHNICAL ENGINEERING SERVICES (TES)	32
10.1	GENERAL.	
10.1.1	Proposal Request for TES	33
10.1.2	Travel	33
10.1.3	TES Trip Report IAW CDRL J0001.	
10.1.4 10.1.5	TES Response Time	
10.2	INSTALLATION / DE-INSTALLATION / RELOCATION	
10.2.1	Installation/De-installation/Relocation.	
10.2.2	Installation/De-installation.	34
10.2.3	Relocation of AIT-V Components	
10.2.4	Installation Plans.	
10.3	CONTRACT SUPPORT PERSONNEL.	
11	DOCUMENTATION REQUIREMENTS.	
11.1	GOVERNMENT RIGHTS	35
11.2	COMMERCIAL USER MANUALS	35
11.3	SOFTWARE REFERENCE DOCUMENTATION	35
12	PRODUCT AND SERVICES ORDERING CATALOG (CDRL K0001)	35
12.1	PURPOSE.	35
12.2	FORMAT	36
12.3	SECTIONS	36
12.3.1	Ordering Procedures.	
12.3.2	Equipment.	
12.3.3 12.3.4	Software	
12.3.5	Technical Engineering Services.	
12.3.6	Training.	36
12.3.7	Warranty Support.	
12.3.8 12.3.9	Preventative Maintenance	
13	CERTIFICATIONS.	
13.1	ENERGY STAR.	
13.2	NONINCENDIVE CERTIFICATION.	
13.3	RUGGED ENVIRONMENT CERTIFICATION	
13.4	PRODUCT SAFETY CERTIFICATION	
13.5	TRADE AGREEMENTS ACT	
13.6	ELECTROMAGNETIC COMPATIBILITY (EMC) COMPLIANCE	
20.0	(Line) Com International Communication	

ELF-CERTIFICATION	13.7
DEPARTMENT OF DEFENSE (DOD) UNIFIED CAPABILITIES (UC) APPROVED PRODUCTS LIST 7	13.8 (APL).
ACKGROUND INVESTIGATIONS FOR CONTRACTOR PERSONNEL38	14
ACKGROUND38	14.1
AC FILE RECORDS38	14.2
ONTINUED PERFORMANCE DURING SUPPORT OF CRISIS SITUATIONS, CONTINGENCY OR E	14.3 EXERC
PRGANIZATION CONFLICT OF INTEREST (OCI)	15
ION-DISCLOSURE AGREEMENT (NDA)	15.1
NTI-TERRORISM / OPERATIONS SECURITY REQUIREMENTS39	16
IST OF DELIVERABLES40	17

#### 1 GENERAL SCOPE.

The mission of Product Director Automated Movement and Identification Solutions (PD AMIS) is to provide a single point of contact for procurement and technical expertise across the suite of Automatic Identification Technology (AIT) enabling technologies that support focused logistics, Total Asset Visibility (TAV), and the integration of global supply chains. The Automatic Identification Technology (AIT) contract will provide commercial hardware, software, documentation, and, services to authorized users worldwide. Services include training and warranty, and Technical Engineering Services (TES). Hardware and software delivery and installation, as well as performance of associated training, warranty, and documentation shall be required at Continental United States (CONUS) and Outside the Continental United States (OCONUS) Government sites. Performance of TES shall be required at CONUS and OCONUS Government sites and the contractor facility.

# 1.1 AUTOMATIC IDENTIFICATION TECHNOLOGY ACQUISITION OBJECTIVES.

The objectives of the Automatic Identification Technology V (AIT-V) acquisition are to provide a state-of-the-art, common, integrated structure for logistics tracking, locating, and monitoring of assets and processes. In addition, data collection, storage information, information processing, and transmission of AIT data will greatly enhance systems within Department of Defense (DoD), United States Coast Guard (CG), North Atlantic Treaty Organization (NATO), Coalition Partners, other Foreign Military Sales (FMS), and other Federal Agencies. AIT technologies will provide standardization among Government users of AIT components purchased from this Contract.

# 1.2 DESCRIPTION AND SPECIFICATION.

- a. This Performance Work Statement (PWS) sets forth the requirements for the AIT-V technology acquisition. The Contract shall provide for state-of-the-art, commercial items needed for automatic identification, data collection, keyless data entry, data processing, data storage, data retrieval, data transmission, and the tracking of assets, including the use of Radio Frequency (RF) technology for users throughout DoD, CG, NATO, Coalition Partners, other FMS, other Federal Agencies, and contractor purchases in support of DoD. The Government requires software for development (e.g., libraries, device drivers, application programming interfaces, and software development tool kits), equipment operating systems, radio frequency transaction management (i.e., RF engines), bar code label and form generation, application generation software, application software development kits, and communications. Associated technical engineering services (and turnkey integration services, systems integration, software development, surveys and installations), instruction and training, warranty, documentation, and program management are required.
- b. The technologies required by the Government encompass bar code symbologies, contact or touch memory, direct thermal and thermal transfer printing, radio frequency data communications, and newer technologies as they are further developed. These newer technologies may include, but are not limited to, biometrics, systems using satellite communications to relay data and provide position information, cellular communications, voice recognition, smart labels (combined bar code label and RF transponder), Item Unique Identification (IUID) marking equipment, and Radio Frequency Identification (RFID) technologies. The Government requires equipment with these technologies to support both current and future requirements. The requirements are for both civilian and military operations worldwide. The Government requires equipment compliant with open systems standards as described in the Defense Information Standards Registry (DISR).

The categories of required equipment include, but are not limited to:

- 1. Data collection devices (portable, pen-based, and mobile);
- 2. Bar code laser scanners and imaging scanners;
- 3. Printers (direct thermal and thermal transfer bar code label printers); and
- 4. Wireless Communications Equipment.
- c. Turnkey solutions integrating technology purchased under the AIT-V Contracts with existing Government provided Passive RFID and Active RFID shall be provided under TES Task Orders to provide a transparent solution to the user. To support the warfighter in field operations, the AIT-V Contract shall also provide transit cases to safely transport AIT-V equipment and related accessories required to install and operate AIT-V equipment. The AIT-V equipment is required to meet worldwide DoD and CG, NATO, Coalition Partners, and other Federal Agencies needs in various CONUS and OCONUS locations. Since DoD components have shared AIT technology with Allied partners in joint operations, such as Operation Enduring Freedom and Operation Iraqi Freedom, the

AIT-V Contracts will be available for orders to meet FMS requirements in order to provide standardization for logistics support with Allies.

#### 1.3 AIT-V APPLICATIONS.

Some anticipated AIT-V applications include, but are not limited to:

- a. Inventory and warehousing environments;
- b. Large open-area storage facilities (austere marshaling areas, and staging and assembly areas), with or without electrical power or an established communications infrastructure;
- c. Maintenance, repair, and tracking facilities;
- d. Entry and exit points of military facilities, and roadside installations;
- e. Restricted office and laboratory environments;
- f. Transactions at custody exchange points (for example, weapons issue facilities);
- g. Military transportation community (for example, seaports and air terminals), and petroleum distribution points (including fueling operations at airports, in-flight, and at sea);
- h. Handling of hazardous, explosive, or other regulated materials; and
- i. Military convoys.

# 1.4 WORLD WIDE GEOGRAPHIC SUPPORT.

The Government requires equipment that can be used worldwide. The Contractor shall provide AIT-V hardware, software, documentation, and incidental services, to include TES, training, and warranty to support the DoD operations in U.S. Northern Command (USNORTHCOM), U.S. Pacific Command (USPACOM), U.S. Central Command (USCENTCOM), U.S. European Command (USEUCOM), U.S. Southern Command (USSOUTHCOM) and, U.S. Africa Command (AFRICOM).

# 1.5 RESTRICTION OF HAZARDOUS SUBSTANCES (ROHS).

All hardware provided under the Contract shall comply with the Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment: <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0095:EN:HTML">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0095:EN:HTML</a>.

# 1.6 OFFICIAL HOURS OF OPERATION.

The Contractor shall provide support on TES during local Official Hours of Operation, based on the geographic location of the Government site at which the support will be provided. Help Desk requirements are specified in the paragraph entitled "Toll-Free Customer Support Help Desk."

#### 1.7 ATTACHMENTS.

The following attachments are listed below and are also included as attachments at the end of this document:

PWS Attachment 1, Blank

PWS Attachment 2, AIT-V Labor Category Descriptions

PWS Attachment 3, DD 254, Department of Defense Contract Security Classification Specifications

PWS Attachment 4, Army Information Assurance (IA) Letter to Industry

PWS Attachment 5, Contract Level Metrics

PWS Attachment 6, AIT-V Asset Management Report requirements

PWS Attachment 7, Monthly Equipment and Service Report

PWS Attachment 8, AIT-V Product Demonstration Criteria

#### 2 APPLICABLE DOCUMENTS, DEFINITIONS, AND ACRONYMS.

# 2.1 FEDERAL INFORMATION PROCESSING STANDARDS.

Copies of the Federal Information Processing Standards (FIPS) may be obtained from:

U.S. Department of Commerce National Technical Information Service 5301 Shawnee Rd, Alexandria, VA 22312

Telephone: 1-800-553-6847 Website: http://www.ntis.gov

# 2.2 AMERICAN NATIONAL STANDARDS INSTITUTE.

Copies of ANSI standards may be obtained from:

American National Standards Institute 25 W 43rd Street 4th Floor New York, NY 10036 Customer Service or Document Sales 8:30am – 5:00pm EST Telephone: 1.212.642.4980

http://www.ansi.org

#### 2.3 INTERNATIONAL ORGANIZATION FOR STANDARDIZATION.

Copies of ISO standards may be obtained from: <a href="http://www.iso.org/iso/home.htm">http://www.iso.org/iso/home.htm</a>.

#### 2.4 FEDERAL COMMUNICATION COMMISSION REGULATIONS.

Federal Communications Commission Regulations may be obtained from the Government Printing Office web site: <a href="http://bookstore.gpo.gov">http://bookstore.gpo.gov</a>

#### 2.5 UID AND IUID POLICY.

Updates to Policy and associated Guides for Unique Identification (UID) and Item Unique Identification (IUID) of Tangible Items, can be obtained from: <a href="http://www.acq.osd.mil/dpap/pdi/uid/index.html">http://www.acq.osd.mil/dpap/pdi/uid/index.html</a>

#### 2.6 DEFINITIONS AND ACRONYMS.

The following are definitions of terms used in this PWS. All other definitions and meanings used shall be those, which are commonly used in the AIT industry:

<u>Assured Radio Deactivation</u> - a process or design that prevents the end user from enabling any/all integrated HHT radio(s), and there can be no possibility of unintentional enabling the HHT radio(s) as a result of a warm or cold boot. Methods of Assured Radio Deactivation could include; not integrating radio(s) into the HHT platform, disabling the HHT radio(s) at the vendor/OEM facilities, or allowing HHT radio deactivation by a systems administrator via a protected password.

<u>Automatic Identification Technology (AIT)</u> Microprocessor-based, hand-held devices designed to gather, process, and store source-entry data, and transmit and receive data.

<u>Configuration Item</u> A configuration item is an aggregation of hardware or software that satisfies an end-use function and is designated by the Government for separate configuration management.

Continental United States (CONUS) All locations and sites within the 48 contiguous States.

<u>Equipment</u> | The term equipment as used throughout the PWS refers to any combination of hardware, software, device drivers, utilities, libraries, and firmware.

<u>Functional Configuration Audit</u> | The formal examination of the functional characteristics of a configuration item to verify that the item has achieved the requirements specified in its functional and allocated configuration documentation.

<u>Hand-held, Non-contact Bar Code Scanners</u> These bar code scanners are lightweight and ergonomically designed, provide bar code scanning from varying distances, and do not require the user to physically touch the bar code with the scanner.

HERO | Hazards of Electromagnetic Radiation to Ordnance (See paragraph entitled "Ordnance Environment").

<u>Host Computer</u> A computer running Microsoft Windows XP or latest version Operating System (updated with the latest Service Pack), or other common operating system executing application programs on behalf of users, and employing standard network communication services in support of this function.

<u>IEEE 802.11</u>– throughout the PD AMIS AIT-V PWS, reference to the Wireless IEEE STD 802.11 is synonymous with the current revision, IEEE Std 802.11-2012 and all previously published amendments – specifically IEEE Std 802.11a<sup>TM</sup>-1999, IEEE Std 802.11b<sup>TM</sup>-1999, IEEE Std 802.11b-1999/Corrigendum 1-2001, IEEE Std 802.11d<sup>TM</sup>-2001, IEEE Std 802.11g<sup>TM</sup>-2003, IEEE Std 802.11h<sup>TM</sup>-2003, IEEE Std 802.11i<sup>TM</sup> (WPA-2).

<u>Industrially Hardened Components</u>: Components that can operate in a warehouse or manufacturing setting and survive the rough treatment and handling often found in shipping areas, loading docks, catwalks, ladders, or on the floor of a manufacturing facility.

Non-Government Standard | A standardization document developed by a private sector association, organization, or technical society, which plans, develops, establishes, or coordinates standards.

Nonincendive | See paragraph entitled "Hazardous Environment."

Outside Continental United States (OCONUS) | All locations outside the 48 contiguous States.

Outside Official Hours of Operation — All hours not included in Official Hours of Operation, i.e., from 5:00 p.m. to 8:00 a.m. local time, Monday through Friday, and all day during Saturday, Sunday and U.S. Federal and Host Nation holidays, based on the geographic location of the U.S. Government site.

<u>Return Material Authorization (RMA)</u>: A number assigned by the Contractor and furnished to the AIT-V user to assist in quickly ascertaining the status of components returned for warranty service.

<u>Set:</u> The PWS uses "set" when defining the battery requirement as a single battery or multiple batteries depending on what is required for the battery operated device to meet the specifications of the PWS.

Workday: Monday through Friday, excluding U.S. Federal holidays.

The following acronyms are used in this PWS:

AC Alternating Current

AIT Automatic Identification Technology ANSI American National Standards Institute API Application Programming Interface

ASCII American Standard Code for Information Interchange

CAC Common Access Card

CAGE Contractor And Government Entity

CCP Contract Change Proposal

CD Compact Disk CG Coast Guard

CLIN Contract Line Item Number CONUS Continental United States

COR Contracting Officer's Representative

DC Direct Current

DISR Defense Information Standards Registry

DoD Department of Defense EC Engineering Change

EMC Electromagnetic Compatibility
FCA Functional Configuration Audit
FCC Federal Communications Commission

FMS Foreign Military Sales

HERO Hazards of Electromagnetic Radiation To Ordnance

HHT Hand Held Terminal

IETM Interactive Electronic Technical Manuals

IP International Protection rating

ISO International Organization for Standardization

IUID Item Unique Identification

IEC International Electrotechnical Commission

IPT Integrated Product Team LAN Local Area Network

MESR Monthly Equipment Service Report

NEMA National Electrical Manufacturer's Association

NI Nonincendive

NIST National Institute of Standards and Technology

NSN National Stock Number

OCONUS Outside Continental United States
OEM Original Equipment Manufacturer

OS Operating System
PC Personal Computer

PCA Physical Configuration Audit PPR Project Progress Review RAM Random Access Memory

RF Radio Frequency

RFDC Radio Frequency Data Communications

RFID Radio Frequency Identification RMA Return Material Authorization

ROM Read Only Memory
SOW Statement of Work
TCO Total Cost of Ownership

UC APL Unified Capabilities Approved Product List

UID Unique Identification
UII Unit Item Identifiers
UPC Universal Product Code

# 3 AIT-V SYSTEM REQUIREMENTS.

# 3.1 GENERAL.

The Government requires equipment that supports the requirements of the Defense Information Standards Registry (DISR). The Government requires Contractor support during Official Hours of Operations. AIT-V commercial equipment and its components shall operate in worldwide locations and in the identified environments. The equipment shall support required industry standard symbologies. The equipment shall support U.S. and Host Nation Country electrical power and radio frequency requirements. The platforms of Automatic Identification Technology are required to support the requirements of the Government. Transit Case configurations are required to support missions that require rapid deployment worldwide of groups of AIT-V equipment. The Government requires commercial software packages and software for application development. Program Management is required to support the Government's efficient execution of this Contract. Warranty services are required to ensure the reliability and availability of AIT-V equipment. Technical Engineering Services are required to help the Government incorporate AIT-V equipment into its applications. Instruction, training and documentation are required to inform and educate the Government users.

# 3.2 DEFENSE INFORMATION STANDARDS REGISTRY (DISR) COMPLIANCE.

The DISR is the minimal set of rules governing the arrangement, interaction, and interdependence of the parts or elements that together form an information system. Its purpose is to ensure that DoD systems are interoperable, scalable, and portable. AIT-V equipment specified in this Contract is not considered by DoD to be a system. Rather, AIT-V equipment is used to provide data entry front-ends for DoD systems. This Specification includes small computer platforms and components that may be proprietary, or that have neither the capacity nor the scope to satisfy DISR requirements. For example, the operating systems for hand held terminals do not meet Common Operating Environment requirements. DISR requirements for modeling and designing a system are also not required by this Contract. Systems developers incorporating AIT-V equipment purchased from this Contract will address AIT product modeling and design requirements in their system models and designs. The DISR requirement for purposes of this Contract is for AIT-V equipment to interface with supported systems. Interface requirements for AIT-V equipment are part of the specifications for these components. For each component provided by the Contractor, the Contractor shall identify each external interface of the component for which a standard interface specified in the DISR applies, and shall certify that each interface is compliant with a DISR standard.

#### 3.3 OPERATING ENVIRONMENTS.

AIT-V components shall operate in diverse environments, and under a full spectrum of climatic conditions. AIT-V components may be subjected to rough handling, shock, and vibration during transportation, setup, and dismantling. All AIT-V components shall be operated in industrial, hazardous, and ordnance environments, on board surface and subsurface naval vessels, aircraft, tanks, in conditions that range from protected and controlled (office settings) to extremely harsh and severe environments, and in areas with high levels of electromagnetic noise and interference. AIT-V components are required for outdoor use and may be subjected to desert and Arctic areas. The Contractor shall certify that the provided components meet applicable Environmental Protection Act (EPA) requirements. The Government requires AIT-V equipment that can be used in the following environments: electromagnetic, hazardous, ordnance, radio frequency, and rugged environments. However, the Laser Marking Equipment and Integrated Marking Cart Configuration are exceptions and are intended for use in an indoor industrial environment.

#### 3.3.1 ELECTROMAGNETIC ENVIRONMENT.

Commercial AIT-V equipment may be used in the vicinity of spectrum-dependent devices that receive low-level signals and/or transmit high-level signals (See MIL-STD-464A (<a href="https://acc.dau.mil/CommunityBrowser.aspx?id=127378&lang=en-US">https://acc.dau.mil/CommunityBrowser.aspx?id=127378&lang=en-US</a>): Electromagnetic Environmental Effects Requirements for Systems). In order to certify the use of commercial AIT-V equipment in these environments, the Government may subject representative categories of equipment to radiated emission and susceptibility tests (See MIL-STD 461D (<a href="https://acc.dau.mil/CommunityBrowser.aspx?id=127372">https://acc.dau.mil/CommunityBrowser.aspx?id=127372</a>): Requirements for the Control of Electromagnetic Interference Emissions and Susceptibility, and MIL-STD-462D (<a href="https://acc.dau.mil/CommunityBrowser.aspx?id=127377&lang=en-US">https://acc.dau.mil/CommunityBrowser.aspx?id=127377&lang=en-US</a>): Measurement of Electromagnetic Interference Characteristics). The Contractor shall support Government-testing efforts by providing technical data sheets and responding to the Contracting Officer's Representative (COR) requests for additional data.

# 3.3.2 HAZARDOUS ENVIRONMENT.

Where specified in the PWS, the Contractor shall provide equipment that is identified and certified as Nonincendive (NI) for operation in environments where flammable and explosive gases and vapors may be present. At a minimum, the following NI requirements shall be met:

```
Class 1 (Gases and Vapors)
Division 2 (Not present in normal operation)
Groups

A (Acetylene)
B (Hydrogen)
C (Ethyl Ether, Ethylene)
D (Acetone, Ammonia, Benzene, Butane, Cyclopropane, Ethanol, Gasoline, Hexane, Methanol, Methane, Natural Gas, Naphtha, Propane)
Class 2 (Combustible Dust)
Division 2 (Not present in normal operation)
Groups
```

F (Combustible carbonaceous dusts)
G (All other combustible dusts, such as grain dust)

Class 3 (Easily Ignitable Fibers)
Division 2 (Not present in normal operation)

NI is a rating classification of equipment specifically defined in the National Electrical Code (NEC). To be given an NI rating, the Contractor shall have demonstrated that equipment cannot, under normal operation, produce a spark or other undesirable effects that might cause combustion in any potentially hazardous environment. The presence of gases, vapors, flammable liquids, combustible dust, or ignitable fiber or flyings are examples of potentially hazardous environments. Equipment shall be certified by an approved testing laboratory meeting OSHA standards. Circuits shall not produce a spark under normal operation. AIT-V equipment may be used under conventional, chemical, or biological warfare conditions. The Contractor shall label components that are approved for use in a hazardous environment in accordance with governing body markings.

#### 3.3.3 ORDNANCE ENVIRONMENT.

AIT-V equipment may be used in the vicinity of ordnance susceptible to radiated energy. In order to certify that AIT-V equipment is safe to use in these environments, the Government will select and subject a single item from each pertinent AIT-V Contractor's equipment categories to stringent Hazards of Electromagnetic Radiation to Ordnance (HERO) environment testing (See MIL-STD 464A).

#### 3.3.4 TESTING.

If required by the Government user, each AIT-V item tested shall successfully complete HERO testing prior to being made available for ordering on the AIT-V Contract to include equipment added after contract award. Each AIT-V Contractor shall be responsible for providing any and all support required to successfully complete HERO testing for their equipment at the direction of the Government COR at no additional cost to the Government. Contractors may be required to provide on-site support at the Government test facility (USN Dahlgren Laboratory) to support testing. The Government will bear the cost of the initial testing for each AIT-V hardware item. All subsequent testing costs due to failure of an item to meet the HERO requirements shall be the responsibility of the Contractor.

#### 3.3.5 SPECTRUM SUPPORTABILITY COMPLIANCE.

PD AMIS will obtain spectrum supportability guidance and approvals upon award of contract for equipment that is designed to either transmit or receive electromagnetic (radio frequency) energy. Spectrum supportability includes spectrum certification, frequency assignments, and host nation coordination where employment of the system or equipment is planned. Radio frequency dependent components of the proposed system shall comply with applicable DoD, national, and international spectrum management policies and regulations to include spectrum certification in accordance with DoD Directive 4650.1, "Management and Use of the Radio Frequency Spectrum" and DoD Directive 5000.1, "The Defense Acquisition System". Frequency allocation shall be documented with a DD Form 1494 (APPLICATION FOR EQUIPMENT FREQUENCY ALLOCATION) and/or a "Note to Holder" as appropriate. The Contractor shall provide the technical data required to complete the spectrum supportability process, including information concerning specifications and testing of the transmitter, receiver, and antenna characteristics necessary for host nation coordination. PD AMIS will apply for spectrum supportability by submitting DD Form 1494. The Contractor shall provide the technical support necessary to complete the DD Form 1494 no later than 30 days after the effective date of contract award or approval of a contract change proposal (CCP) to add or replace applicable items on the Contract. All Contractor-provided spectrum supportability compliance support shall be provided at no additional cost to the Government.

# 3.3.6 RUGGED ENVIRONMENT.

AIT-V hardware will be used by the Government in "rugged environments" (i.e. industrial and field settings under temperate, arctic, maritime, desert, and tropical conditions). The words "rugged" or "ruggedized", when used in this PWS, mean that the Government requires AIT-V hardware that is industrially hardened, designed, built, and tested to ensure reliable and continuous performance in all rugged environments. In this environment, AIT-V components may be subjected to rough handling, continuous operational use, vibration, dropping onto hard surfaces, and shock caused by transportation over rough terrain. Mobile devices may experience a drop to concrete from a height of four

feet while in normal use. Contractor-provided AIT-V HHTs shall be ruggedized (Industrial Hardened) and weatherproof (rain, wind, etc.) and shall comply with the IEC 60529 IP54 rating requirement.

# 3.4 ORIGINAL EQUIPMENT MANUFACTURER ENGINEERING CHANGES.

All Original Equipment Manufacturer (OEM) sponsored Engineering Changes (ECs) adopted prior to the effective date of contract award shall be incorporated into the hardware and software delivered under this contract.

#### 3.5 CONNECTIVITY TO GOVERNMENT-OWNED COMPUTERS.

The Government currently uses a wide variety of computers that shall be connected to the Contractor-provided AIT-V components. Connections shall be in accordance with standard protocols (e.g., RS-232, RS-485, USB, and TCP/IP).

# 3.6 AC/DC POWER REQUIREMENTS.

#### 3.6.1 POWER REQUIREMENTS.

The Contractor shall provide equipment designed and certified to meet quality and safety standards of Underwriters Laboratory (UL) or equivalent certified. The Contractor shall provide AIT-V equipment with power supplies, fuses, and cables for AIT-V components that shall allow the use of locally available commercial power. All AIT-V components shall be compatible with the power supply, and power outlets or connectors, for the geographic area in which it is to be operated as specified in the Delivery Order, Task Order or Government Purchase Card Order. The Contractor shall also provide all necessary and appropriate AC plug adapters (when required for AC operation) for AIT-V components delivered. The plug adapters are exempt from UL or equivalent certification.

#### 3.6.2 POWER SUPPLIES.

AIT-V devices and printers shall, to the extent available, automatically enter a low-power mode after a period of inactivity and automatically return to active mode upon resumption of system activity or receipt of external input. AIT-V devices and printers shall be shipped with the power management feature enabled. The power supplies and AC adapters (when required for AC operation) shall be of a type to prevent damage to the device when transient high voltage is present. The Contractor shall provide a single unit to convert the plug type to one that is required by the country where the equipment will be operated. The power supplies and AC adapters shall be appropriately marked to indicate the product's safety and quality.

# 3.6.3 BATTERY-OPERATED AIT-V EQUIPMENT.

The Contractor shall provide rechargeable batteries with each battery-operated AIT-V device acquired under this Contract, unless otherwise stated.

# 3.6.3.1 Rechargeable Batteries.

The Contractor shall provide rechargeable batteries that supply eight hours operation under typical use, unless otherwise stated (Note: see more specific requirement for printers in subparagraphs under the paragraph entitled "Bar Code Label Printers") and that require no more than five hours to fully recharge. Typical use is benchmarked as the device powered on with two complete actions per minute. HHTs are to scan, decode, display data, and transmit data from (via RF) two bar codes per minute. Rechargeable batteries shall be chargeable without removal from AIT-V equipment. Batteries or battery packs shall be user-replaceable in the field in less than two minutes, and without special tools. Positive and negative terminals of rechargeable batteries shall be clearly marked unless the shape of the rechargeable battery prevents improper or reversed installation. All battery charging devices shall be equally capable of charging batteries, e.g. waking up a battery, if required, to affect a charge.

#### 3.6.3.2 Internal Back-up.

The Contractor shall provide:

- a. A method to maintain the data content of RAM for all HHTs during changing of the battery and for a minimum of five minutes when the battery is removed.
- b. AIT-V Devices shall not require special storage procedures to prevent internal backup batteries from failing.
- c. A method to maintain the RAM of HHTs for a period of 72 hours when not in use.

#### 3.6.3.3 Low-Power Operation.

Battery-operated AIT-V equipment shall provide the operator with a visible signal when battery power is low. The low-battery power signal shall provide the operator with at least five minutes of advance warning of an automatic shutdown. To preserve stored data and to conserve power, battery-operated AIT-V equipment shall automatically shut down before battery power is completely depleted.

# 3.7 ACCESSIBILITY.

- a. The Contractor shall provide a comprehensive list of all provided specific electronic and information technology (EIT) products (supplies and services) that fully comply with Section 508 of the Rehabilitation Act of 1973, per the 1998 Amendments, and the Architectural and Transportation Barriers Compliance Board's Electronic and Information Technology Accessibility Standards at 36 CFR Part 1194. The Contractor shall clearly indicate where this list with full details of compliance can be found (e.g., Contractor, subcontractor, vendor's, or other exact web page location). The Contractor shall ensure that the list is easily accessible by typical users beginning five calendar days after receipt of the notice to proceed. The Contractor shall maintain this detailed listing of compliant products for the full contract term, including all forms of extensions, and shall ensure that the detailed listing is updated within three calendar days of changes to the Contractor, subcontractor's, or vendor's product line.
- b. The Contractor shall ensure that all EIT products that are less than fully compliant are the most compliant products and services available to satisfy this Contract's requirements.
- c. For every EIT product provided under this Contract that does not comply with 36 CFR Part 1194, the Contractor shall, at the discretion of the Government, make every effort to replace or upgrade it with a compliant product or service, if commercially available and cost neutral.

#### 3.8 BAR CODE SYMBOLOGIES.

Where bar code capability is required by this specification, equipment and software shall decode and printers and marking equipment shall produce bar codes in symbologies that comply with industry standards and specifications for Code 39, Code 128, CODABAR, Interleaved 2 of 5, GS1 Bar Codes, Universal Product Code (UPC), Data Matrix ECC 200, and PDF 417. Where bar code capability is required by this specification, Contractor-provided equipment shall provide for the production and reading Bar Code labels and markings and decode labels in accordance with the specifications defined in MHI MH10.8.2 Data Identifier and Application Identifier Standard, MHI MH10.8.3M Material Handling - Unit Loads and Transport Packages – Two Dimensional Symbols and ANSI INCITS 182-1990 Bar Code Print Quality Guidelines. When additional standards are developed during the life of the contract, the Government may require other symbologies. Equipment shall be capable of printing or decoding these symbologies with a nominal 'x' dimension of 10 mils for linear and PDF. Equipment shall be capable of decoding Data Matrix at 7.5 mil cell module width (10 mil for HHT-C) and printing at 10 mil cell module widths.

#### 3.9 WARRANTY REQUIREMENTS.

The Contractor shall provide a minimum of a three (3) year warranty (or a five (5) year warranty or seven (7) year warranty where specified in this PWS, five or seven year warranty excludes batteries) including all parts, labor, and transportation costs for all AIT-V components provided under this Contract. All products delivered on AIT-V shall have a permanent label affixed to each serialized item (excluding batteries and cables) that at a minimum identify; the Contractor company name, telephone number and website URL. The Contractor shall provide a minimum of a three (3) year warranty for all software products. The three year warranty shall be included in the purchase price of the component, and not priced separately.

# 3.10 EQUIPMENT DELIVERY REQUIREMENTS.

The Contractor shall provide all necessary equipment, software, firmware, cables, connectors, drivers, essential accessories, or ancillary items in order to make each deliverable item fully operational. Software shall be provided with the item and be available for download from the contractor's site.

# 3.11 EXPEDITED DELIVERY REQUIREMENTS.

The Contractor shall provide Expedited Delivery for CONUS and OCONUS locations when specified in equipment orders (Delivery Orders and Government wide Purchase Card Orders). Delivery shall comply with the requirements of the paragraph entitled "Expedited Delivery" in Section H "Special Contract Requirements" of the RFP.

# 3.12 UNIQUE IDENTIFICATION.

Applicable items, as identified in DFARS 252.211-7003, Item Identification and Valuation (Jun 2013), found in Section I of the RFP, shall be permanently marked in accordance with Military Standard 130N w/Ch 1, Department of Defense Standard Practice: Identification Making of US Military Property and Version 2.5 of the DoD Guide to Uniquely Identifying Items. If an original part number is used as a component of the Unique Item Identifier (UII), it shall be the identifier assigned by the original design activity or by a controlling nationally recognized standard. Contractors using Wide Area Workflow (WAWF) shall use the receiving report capability of WAWF to register the Item Unique Identification (IUID) of those end items (CLINs) requiring IUID but may use alternate methods of registering other items such as IUID-required components of end items. Contractors not using WAWF will use alternate methods to register all items requiring IUID. The required Error Correction Code 200 Data Matrix marks containing the unique identification data will be verified and validated as prescribed by MIL-STD-130N w/ch1 and maintain the reports of those validation and verification results, subject to government examination, for one year.

#### 3.13 IPV6 ENABLED ASSETS.

The Contractor shall warrant that each item delivered under the AIT-V Contract shall accurately transmit, receive, process, and function correctly using the Internet Protocol Version 6 (IPv6). Specifically, the Contractor warrants that: 1) each item delivered complies with the current DISR developed IPv6 standards profile; 2) each item delivered maintains interoperability with IPv4 (specifically, shall operate on/coexist on a network supporting IPv4 only, IPv6 only, or a hybrid of IPv4 and IPv6); and 3) each item delivered is supported by the Contractor's IPv6 technical support. Additionally, as IPv6 evolves, the Contractor shall upgrade or provide an appropriate migration path for each item delivered. The duration of this warranty and the remedies available to the Government for breach of this warranty shall be as defined in, and subject to, the terms and limitations of the Contractor's standard commercial warranty or any other warranties proposed by the Offeror, provided that notwithstanding any provision(s) to the contrary in such commercial warranty or warranties, the remedies available to the Government under this warranty shall include repair or replacement of any product whose non-compliance is discovered and made known to the Contractor no later than one year after acceptance. Nothing in this warranty shall be construed to limit any rights or remedies the Government shall otherwise have under an AIT-V Contract with respect to defects other than IPv6 performance.

# 4 EQUIPMENT REQUIREMENTS.

The Contractor shall provide programmable Hand Held Terminals, imagers, IUID marking devices, printers, wired and wireless communications capabilities, interfaces, and various storage media with the associated readers and writers. The Contractor shall participate in AIT-V Product Demonstration (Attachment 8), to provide the Government an opportunity to observe the Offeror's hardware and software products in operation, and to familiarize the Government with the various features of the Offeror's hardware and software products.

# 4.1 HAND HELD TERMINAL (HHT).

Hand Held Terminals (HHT) are microprocessor-based, hand-held devices used to automatically capture and store data. The HHTs shall accept data through touch screen, pen base (stylus), keypad, integral bar code imager, and attached devices, and shall communicate via communications docking station or 802.11 networks with a host computer for data transfer and for downloading HHT program instructions from a host computer. The Contractor shall provide a Federal Information Processing Standard (FIPS 140) client solution for all the Hand Held Bar Code Terminals that have activated wireless communications to allow for secured communication. The client shall be FIPS 140-2 Level 1 Compliant and Certified. Client software that is FIPS 140-2 Level 2 Compliant and Certified shall be proposed via a Contract Change Proposal when it becomes commercially available. The devices shall be provided with an operating system as described in the paragraph entitled "Hand Held Terminal Operating Systems." HHTs E and F shall be delivered with an integrated Common Access Card (CAC) Reader.

"All HHTs shall be capable of supporting CAC enablement software. HHTs shall also be capable of supporting DoD Public Key Infrastructure (PKI) interfaces (reference:

http://iase.disa.mil/pki/index.html). The Contractor shall provide Software Development Resource Kits that can be used with standard application development tools to produce executable code for all of the provided Hand Held Bar Code Terminals. The Contractor shall have available an SDK for their devices, which can be downloaded at no additional cost for Government users. The unit shall also charge the batteries in the HHT without removing the batteries from the HHT. These HHTs are intended for use in the office, warehouse, and outdoor military environments worldwide.

#### 4.1.1 TECHNICAL REQUIREMENTS.

The Contractor shall provide HHTs with all of the following attributes and components, unless otherwise noted:

- a. An integral bar code imager with capability to read the linear and 2-D bar codes specified in the paragraph entitled "Bar Code Symbologies";
- b. The integral bar code imager (with the exception of the HHT-D with Direct Part Mark reading capability) shall provide a depth of field of at least 4 inches for low and medium density bar codes and 2 inches for high density bar codes;
- c. Ruggedized construction with minimum IP54 rating;
- d. Minimum operating temperature range of  $-10^{\circ}$  to  $+50^{\circ}$  Celsius;
- e. Certified Nonincendive for HHT-B;
- f. A screen or display that can receive input via stylus and touch;
- g. A minimum full VGA Color display, with minimum display size of 3.5 inches;
- h. A minimum 256 Mbytes RAM;
- i. Retain operator/user data for a minimum of five (5) minutes without main battery power;
- j. A minimum of 512 Mbytes user programmable ROM for OS and Application Software (with the exception of HHT-E and HHT-F);
- k. Operating system (OS) as described under "Hand Held Terminal Operating Systems";
- 1. Provided with one set of operational batteries;
- m. Provided with tethered stylus and spare stylus; (with the exception of HHT-E and HHT-F);
- n. Provided with a user accessible memory card slot; (with the exception of HHT-E and HHT-F);
- o. Provided with Removable Memory Media appropriate to the user accessible memory slot, minimum 2GB capacity; (with the exception of HHT-E and HHT-F);
- p. Built-in Wireless Radio Frequency Data Communications conforming to Bluetooth and IEEE 802.11, with capability to deactivate all radios;
- r. A provision to charge the HHT battery; and
- s. Meet or exceed multiple 4-foot drops to concrete

# 4.1.2 HAND HELD TERMINAL OPERATING SYSTEMS.

The Contractor shall provide HHTs with the latest approved Mobile operating system, unless otherwise stated, configured to provide the following:

- a. Graphical User Interface with Pen/Character Recognition;
- b. Support for both IPv4 and IPv6;
- c. Full system support of color touch screen;
- d. Include FIPS-140 security client;
- e. Include software to perform data synchronization via communication dock and wireless to a host PC;
- f. Full addressing of on-board RAM and ROM memory and storage card memory (with the exception of HHT-E and HHT-F);
- g. Capability to execute non-proprietary development environments/compilers i.e. Java, Basic, C/C++, HTML 5, etc.;
- h. Wireless data communications (IEEE 802.11);
- i. Include an Internet Browser that shall pass XML data and PKI certificates;
- j. Include utility program to monitor and display battery status; and
- k. Ability to host antivirus and firewall software.

# 4.1.3 SEPARATELY ORDERABLE HAND HELD TERMINALS.

4.1.3.1 The Contractor shall provide the following Separately Orderable Components and features/configurations for the HHTs A through D:

- a. Warranty upgrade for total of five (5) years (includes 2 additional years), excludes batteries;
- b. Warranty upgrade for total of seven (7) years (includes 4 additional years), excludes batteries;
- c. Universal (Right or Left-handed) Holster with adjustable, detachable shoulder strap and means of belt attachment;
- d. Detachable handle with trigger (if available and not inherent to HHT);
- e. Rechargeable Battery;
- f. Multiple Battery Charger for a minimum of four (4) HHT batteries;
- g. Single HHT battery charger / communications docking station and USB cable for data communication to host PC. The HHT Battery charger / communications dock shall have at a minimum a one (1) each USB and RJ45 Ethernet port;
- h. One pack of three (3) tethered replacement styli;
- i. Transparent screen protector;
- j. Printer interface cable that provides fastened mating connections between the HHT and portable wearable printer (required for HHT-B for other HHT's, if available) NOTE: Printer interface cable must be able to connect to the HHT when detachable CAC card reader is being utilized (Batch mode configuration);
- k. Disable all wireless communication for assured radio deactivation (create Batch HHT).
- 1. Detachable CAC reader and provision to charge the CAC reader battery from an AC electrical power source, if required; and
- m. FIPS compliant Bluetooth Common Access Card (CAC) Reader, applicable HHT CAC enablement software (if not inherent to the HHT), provisions to pair the HHT and BT CAC reader, and a means to charge the Bluetooth CAC card reader battery from an AC electrical source, if applicable. The Contractor shall affix a permanent label to the CAC reader that states the UL Nonincendive certified Hazardous location designation (as applicable), Ambient Temperature Range, and the following marking shall also appear on the label "WARNING EXPLOSION HAZARD DO NOT CONNECT WHILE CIRCUIT IS LIVE UNLESS AREA IS KNOWN TO BE NON-HAZARDOUS" In addition the contractor shall ensure the OEM's name (or trademark / identifier), electrical ratings and catalog number (or equivalent) markings appear on the device.
- 4.1.3.2 The Contractor shall provide the following Separately Orderable Components and features/configurations for the HHTs E and F:
  - a. Warranty upgrade for total of five (5) years (includes 2 additional years), excludes batteries;
  - b. Warranty upgrade for total of seven (7) years (includes 4 additional years), excludes batteries;
  - c. Holster with adjustable, detachable shoulder strap;
  - d. Detachable handle with trigger (if available and not inherent to HHT);
  - e. Rechargeable Battery;
  - f. Multiple Battery Charger for a minimum of two (2) HHT batteries;
  - g. Single HHT battery charger / communications docking station and USB cable for data communication to host PC. The HHT Battery charger / communications dock shall have at a minimum a one (1) each USB and RJ45 Ethernet port;
  - h. Replacement Styli;
  - i. Transparent screen protector;
  - j. Printer interface cable that interfaces the HHT to the portable wearable printer;
  - k. Detachable hand strap; and
  - 1. Carrying Case.
- 4.1.4 HAND HELD TERMINAL-A (HHT-A) WITH ALPHANUMERIC KEYPAD CAPABILITY IN A COMPACT FORM FACTOR.

The contractor shall provide a hand-held, user-programmable HHT-A, maximum dimensions of 7in x 3.5in x 2.0, weigh less than 1 pound, and alphanumeric keypad capability in a compact form factor .

4.1.5 HAND HELD TERMINAL-B (HHT-B) WITH (FULL ALPHANUMBERIC KEYPAD) AND NI CERTIFICATION.

The contractor shall provide a hand-held, user-programmable HHT-B with full alphanumeric keypad capability. This device shall be NI certified.

4.1.6 HAND HELD TERMINAL-C (HHT-C) WITH EXTENDED READING RANGE AND FULL ALPHANUMERIC KEYPAD.

The Contractor shall provide a hand-held, user-programmable HHT-C with a full alphanumeric keypad. In addition to reading all the Symbologies, this HHT-C shall have the capability of reading extended range linear bar codes (up to 100 mil 'x' dimension on retro-reflective or plain backing) at a range of up to 30 feet.

# 4.1.7 HAND HELD TERMINAL-D (HHT-D) WITH DIRECT PART MARK READING CAPABILITY AND FULL ALPHANUMERIC KEYPAD.

The Contractor shall provide a hand-held, user-programmable HHT-D with a full alphanumeric keypad This HHT-D shall have the additional capability of reading Direct Part Markings encoded in the Data Matrix Symbology on a variety of base materials and produced by the various methods listed in MIL-STD 130N (<a href="https://acc.dau.mil/CommunityBrowser.aspx?id=188658&lang=en-US">https://acc.dau.mil/CommunityBrowser.aspx?id=188658&lang=en-US</a>), including laser etching and dot peen, with minimum cell size of 7.5 mil.

# 4.1.8 HAND HELD TERMINAL-E (HHT-E) INTEGRATED IMAGER, FULL ALPHANUMERIC KEYPAD CAPABILITY AND LARGE DISPLAY.

The Contractor shall provide a hand-held, user-programmable HHT-E with a full alphanumeric keypad capability, Bluetooth, and IEEE 802.11 wireless communications function. The user shall have the capability to enable/disable all radios both manually and by firmware. The HHT-E shall be capable of communicating with the Portable/Wearable Bar Code Label Printer through a cable interface. The HHT-E shall at a minimum, be a ruggedized, Industrially Hardened, dual-core processor, with a shock mounted or solid state 128 GB Hard Drive, 4 GB RAM, 1.2 GHz minimum processing speed, one stylus (no spare required), an integrated CAC reader, four (4) hours operational time with hot-swappable batteries, and docking/ serial/ Ethernet/and two USB port connections. The mobile device shall have a nominal screen size between 9" to 12" diagonal and weigh no more than 4 pounds.

The mobile device shall be configured with the latest version DISA approved Microsoft Operating System (updated with the latest Service Pack). The Contractor shall Harden the OS to the DISA Field Security Operations (FSO) Security Content Automation Protocol (S-CAP). The POC at the Defense Information Systems Agency (DISA) is: disa.letterkenny.FSO.mbx.stig-customer-support-mailbox@mail.mil. For Army orders: the HHT shall be delivered with a default AGM Operating System and Application image load as stated in the guidelines under NETCOM Technical Authority Implementation Memorandum For Army End-User Computing Environment, Version 2 (NETC-G-0412-002-E-STD) or most current version. NETCOM will manage and maintain configuration management control over the standard AGM configuration. The AGM support desk maintains a list of approved hardware vendors. If the Contractor is not listed on the approved Army vendors list, the Contractor shall coordinate with the AIT-V customer (Army government agency) the availability of the appropriate AGM-based image so that it can be integrated onto the HHT platform, or the Contractor shall obtain a customer waiver (exemption) for the AGM install. The contractor shall maintain and update images for their platforms using the AGM standard configuration and provide NETCOM with a copy of each platform specific image delivered to the Army. Note: The US Army Golden Master program is responsible for the release of the Army Standard Baseline Configurations for commonly used computing environment within the Army Enterprise Infrastructure. The AGM baseline may change throughout the life of the contract as directed by the Government.

# 4.1.9 HAND HELD TERMINAL-F (HHT-F) INTEGRATED IMAGER, FULL ALPHANUMERIC KEYPAD CAPABILITY, SMALL DISPLAY.

The Contractor shall provide a hand-held, user-programmable HHT-F with a full alphanumeric keypad capability, Bluetooth, and IEEE 802.11 wireless communications function. The user shall have the capability to enable/disable all radios both manually and by firmware. The HHT-F shall be capable of communicating with the Portable/Wearable Bar Code Label Printer through a cable interface. The HHT-F shall at a minimum, be a ruggedized, Industrially Hardened, dual-core processor, with a shock mounted or solid state 128 GB Hard Drive, 2 GB RAM, 1.2 GHz minimum processing speed, one stylus (no spare required), an integrated CAC reader, four (4) hours operational time with hot-swappable batteries, and docking/ serial/ Ethernet/ and two USB port connections. The mobile device shall have a nominal screen size between 5" to 8" diagonal and weigh no more than 4 pounds.

The mobile device shall be configured with the latest version DISA approved Microsoft Operating System (updated with the latest Service Pack). The Contractor shall Harden the OS to the DISA Field Security Operations (FSO) Security Content Automation Protocol (S-CAP). The POC at the Defense Information Systems Agency (DISA) is: disa.letterkenny.FSO.mbx.stig-customer-support-mailbox@mail.mil. For Army orders: the HHT shall be delivered with a default AGM Operating System and Application image load as stated in the guidelines under NETCOM Technical Authority Implementation Memorandum For Army End-User Computing Environment, Version 2 (NETC-G-0412-002-E-STD) or most current version. NETCOM will manage and maintain configuration management control over the standard AGM configuration. The AGM support desk maintains a list of approved hardware vendors. If the Contractor is not listed on the approved Army vendors list, the Contractor shall coordinate

with the AIT-V customer (Army government agency) the availability of the appropriate AGM-based image so that it can be integrated onto the HHT platform, or the Contractor shall obtain a customer waiver (exemption) for the AGM install. The contractor shall maintain and update images for their platforms using the AGM standard configuration and provide NETCOM with a copy of each platform specific image delivered to the Army. Note: The US Army Golden Master program is responsible for the release of the Army Standard Baseline Configurations for commonly used computing environment within the Army Enterprise Infrastructure. The AGM baseline may change throughout the life of the contract as directed by the Government.

#### 4.2 BAR CODE SCANNING/IMAGING DEVICES.

The Contractor shall provide ruggedized bar code scanning and imaging devices with data conversion and character substitution capabilities. Bar code scanning/imaging devices shall scan bar codes printed with direct thermal, thermal transfer, dot matrix, ink jet, and laser technologies, as well as bar codes printed on colored substrates that meet the grade requirements of subparagraph b below. The scanners/imagers shall read and decode all of the symbologies listed in the paragraph entitled "Bar Code Symbologies." The Contractor shall provide bar code imagers that:

- a. Read the bar codes and densities specified and have a depth of field of at least 4 inches for low and medium density bar codes and 2 inches for high density bar codes and 2D bar codes;
- b. Shall read a minimum print quality of grade C bar codes in accordance with ANSI INCITS 182-1990 (R2002);
- c. Inherently perform data conversion (user configurable) to substitute printable characters for the non-printable ASCII characters utilized in IUID data syntax;
- d. Be provided with a desktop stand to hold the barcode imager when not in use; and
- e. Include a cable interfaces consisting of a coiled, strain-relieved USB cable, expandable from 3 feet to 8 feet in length (except Bluetooth models).

# 4.2.1 IMAGER FOR PC INPUT – GENERAL BAR CODE (TETHERED).

The Contractor shall provide a bar code imaging device that shall read printed symbologies and high contrast data plate markings and shall be user configurable as a keyboard wedge and as a direct serial input device with a USB connector.

# 4.2.2 IMAGER FOR PC INPUT – GENERAL BAR CODE (BLUETOOTH).

The Contractor shall provide a bar code imaging device with communications/charging dock that shall read printed symbologies and high contrast (minimum 50 % contrast) data plate markings and shall be user configurable as a keyboard wedge and as a direct serial input device via FIPS 140-2 level 1 encrypted Bluetooth communications. The imaging device shall have the capability to continue to read and store data when the device is outside of the Bluetooth communications range. The imager shall automatically forward the stored data when the imaging device reestablishes Bluetooth communications with the communications/charging dock.

# 4.2.3 IMAGER FOR PC INPUT – IUID LABEL MARKING.

The Contractor shall provide a programmable bar code imaging device that shall read printed symbologies and high contrast (minimum 50 % contrast) data plate markings. The imager shall include the capability to decode IUID markings and output a properly configured UII String. The imager shall be user configurable as a keyboard wedge and as a direct serial input device with a USB Connector.

# 4.2.4 IMAGER FOR PC INPUT – IUID DIRECT PART MARKING.

The Contractor shall provide a programmable bar code imaging device that shall read direct part markings meeting MIL-STD 130N requirements, including laser etching and dot peen marks on a variety of materiel substrates and surfaces in addition to printed symbologies and high contrast data plate markings. The imager shall include the capability to decode IUID markings and output a properly configured UII String. The imager shall be user configurable as a keyboard wedge and as a direct serial input device with a USB Connector.

#### 4.3 BAR CODE LABEL PRINTERS.

# 4.3.1 GENERAL REQUIREMENTS.

The Contractor shall provide printers designed for single and bulk production of Bar Code Labels. Printers shall be designed and ruggedized for an industrial warehouse environment.

# 4.3.2 TECHNICAL REQUIREMENTS.

The Contractor shall provide ruggedized Bar Code Label Printers that shall generate general purpose labels and special purpose labels with special adhesives for use in rugged environments. They shall produce labels on various synthetic and paper label media utilizing both thermal transfer and direct thermal technologies. The printers shall print bar codes, text, and black and white graphics on the labels. The Contractor shall provide bar code label printers with the following features:

- Each bar code printer shall print all bar code symbologies listed in the paragraph entitled "Bar Code Symbologies" at standard densities with at least a Grade A print quality, as defined in ANSI INCITS 182-1990 (R2002);
- b. Store and produce two forms comparable in size and data content to the DD Form 1348-1;
- c. Print bar codes in all four of the cardinal directions (both picket fence and ladder bar codes);
- d. Print bar code symbologies with a minimum resolution of 203 dpi;
- e. Print bar codes, using direct thermal and thermal transfer printing;
- f. A minimum four-inch throat size; and
- g. Drivers provided for Microsoft Windows 7 or latest version Operating System (updated with the latest Service Pack) operating system.

#### 4.3.3 PORTABLE/WEARABLE BAR CODE LABEL PRINTER.

The Contractor shall provide a Portable Bar Code Label Printer that can be used as a portable or fixed printer with the following attributes and components:

- a. Printer size allows the unit to be easily carried with one hand;
- b. Easily fastened to a belt or shoulder strap;
- c. Delivered with operating rechargeable batteries, with AC adapter;
- d. Host cable to interface to the HHT-B;
- e. Delivered with a USB cable to interface to a PC;
- f. Print speeds of at least one and one half inches-per-second;
- g. Print labels while the printer is being carried by the user; and
- h. Print 1200 linear inches of labels on a single battery.

#### 4.3.3.1 Separately Orderable Components.

The Contractor shall provide the following Separately Orderable Components for the Portable Bar Code Label Printer:

- a. Rechargeable Battery;
- b. Battery Charger; and
- c. Printer Carrying Case with shoulder strap (for printer only) to allow the operator to utilize the printer in an industrial setting while allowing the operator's hands to be free to perform other tasks.

# 4.3.3.2 Consumable Supplies.

The Contractor shall provide the following Consumable Supply for the Portable Bar Code Label Printer: Label and Ribbon Set consisting of six (6) rolls of 4-inch by 6-inch synthetic labels and matching resin-based ribbon stock.

# 4.3.4 STATIONARY BAR CODE LABEL PRINTER.

The Contractor shall provide Stationary Bar Code Label Printers with the following attributes and components:

- a. Built in diagnostic display and keypad for configuration and troubleshooting;
- b. Parallel, USB, and Ethernet communications ports;
- c. Delivered with a USB interface cable;

- d. On-demand printing for at least 16 hours per day;
- e. Use a roll of label stock with a diameter of 8 inches;
- f. Automatic sensing for different label sizes;
- g. Minimum print speed of 6 inches-per-second.

# 4.3.4.1 Configurations.

The contractor shall provide the following models of the Stationary Bar Code Label Printer:

- a. Stationary Bar Code Label Printer; and
- b. Stationary Bar Code Label Printer with Installed Take-Up Reel, that shall rewind an entire 8 inch diameter roll of label stock and have the capacity to dispense a self-stripped label on demand.

# 4.3.4.2 Consumable Supplies.

The Contractor shall provide the following Consumable Supplies for the Stationary Bar Code label Printer:

- a. 8-inch diameter roll of 4-inch by 6-inch synthetic Label stock;
- b. 8-inch diameter roll of 4-inch by 3-inch synthetic Label stock; and
- c. Resin-based Printer Ribbon for 4-inch width labels.
- 4.4 ITEM UNIQUE IDENTIFICATION (IUID) MARKING AND VERIFICATION EQUIPMENT.

# 4.4.1 GENERAL REQUIREMENTS.

The Contractor shall provide equipment for producing IUID marks permanent labels, in the Data Matrix ECC200 symbology and DOD IUID specified data syntax.

# 4.4.2 LASER MARKING EQUIPMENT.

The Contractor shall provide laser marking equipment with the following attributes and components:

- a. Be capable of producing IUID markings on temperature resistant laser etchable layered polyacrylic adhesive film and cutting film to actual label size;
- b. Accommodate stock of minimum size of 5" by 12";
- c. Integrated carbon/HEPA air filtration system;
- d. Safety features to protect the vision of operator and personnel who may be in proximity to equipment in use:
- e. Accommodation for use of 120V 20 amp power; and
- f. Operational software to produce IUID labels.

# 4.4.3 CONSUMABLE SUPPLIES.

The Contractor shall provide the following Consumable Supplies for the Laser Marking Equipment:

- a. Temperature resistant laser etchable layered polyacrylic adhesive film stock to produce white on matte black marking, package of 25 sheets nominal size of 5"x12" for use in above etcher.
- 4.5 VERIFICATION EQUIPMENT.

# 4.5.1 TECHNICAL REQUIREMENTS.

Verification equipment shall verify Data Matrix ECC 200 marks to ISO 15415, SAE AS9132A, and AIM DPO Guideline standards. Equipment shall also validate data structure encoded in the marks to DoD IUID Syntax. At a minimum, the equipment shall verify marks with cell sizes from 7.5 mil to 25 mil and up to one square inch in overall size. The equipment shall include USB to USB interface cable to connect to a computer operating Windows 7 or later and shall include necessary software to produce, store, and print verification reports for each mark verified.

The Contractor shall provide the following models of IUID/Data Matrix Verification Equipment:

a. Desktop Verifier for Labels that shall accommodate label and data plate stock up to 12 inches by 24 inches.

#### 4.6 RADIO FREQUENCY DATA COMMUNICATION CONFIGURATIONS.

The Contractor shall provide UC-APL approved Radio Frequency Data Communication (RFDC) configurations components that use spread spectrum transmission for linking information to material flow in various applications; for example, in yard, warehouse, and retail operations. Configuration components are access points and gateways.

# 4.6.1 TECHNICAL REQUIREMENTS.

The Contractor shall provide spread spectrum RFDC equipment conforming to IEEE 802.11standards. The Contractor shall provide components with field-selectable/adjustable frequency bands. Components shall have an operating range of at least 500 feet in open unrestricted environments. Since the allowable power and frequency bands configurations vary from country to country, the Contractor shall provide units with allowable output power and frequency bands consistent with the laws, regulations, and rules of the country stated on the Delivery Order, or Task Order. These components shall comply with requirements of FCC Part 15, Subparts A, B, and C for Class A digital devices. In order to certify the use of AIT-V equipment in these environments, the Government may subject representative categories of equipment to radiated emission and susceptibility tests (See MIL-STD 461D: Requirements for the Control of Electromagnetic Interference Emissions and Susceptibility, and MIL-STD-462D: Measurement of Electromagnetic Interference Characteristics). Components shall maximize net throughput and conform to IEEE 802.11, Wireless Local Area Networks (WLANs), and provide TCP/IP addressing.

#### 4.6.2 RF ACCESS POINT.

RF access points are small transceivers that are wired into network configurations (combined transceiver, controller, and bridge between wireless and wired communication). These access points permit two-way communications between mobile RF data collection terminals, and a PC or LAN. The Contractor shall provide RF access points that provide IEEE 802.11 spread spectrum communications. The RF access points shall be provided with appropriate antenna(s). The RF access points shall have a direct interface for communicating with a host computer. The access point shall be provided with an IEEE 802.3/Ethernet interface card with a 10BaseT connector and shall implement TCP/IP addressing and shall provide Simple Network Management Protocol, and Management Information Base (MIB) I and MIB II reporting. IEEE 802.3 "Power over Ethernet" function shall be provided. Access Points shall be user configurable by both serial and IP connection. User Configuration function shall allow complete integration into new and existing IEEE 802.11 Wireless Networks.

The Contractor shall provide the following models of the RF Access Point:

- a. Access Point, Protected Environment, these RF Access Points shall be sufficiently ruggedized for use in industrial warehouse and warehouse docking areas when mounted under-cover and shall comply with the IEC 60529 IP54 (minimum) rating requirement; and
- b. Access Point for worldwide indoor/outdoor use, these RF Access Points shall be sufficiently ruggedized and weatherproof (rain, wind, etc.) for use in outdoor locations and shall comply with the IEC 60529 IP66 (minimum) rating requirement.
- c. Access Point, Office Environment, these RF Access Points shall be sufficiently robust for indoor use and do not need to comply with an IEC 60529 rating requirement.

# 4.6.3 RF GATEWAY.

RF gateways provide a communications point between access points and a PC or LAN. The Contractor shall provide RF gateways that provide IEEE 802.11 conformant spread spectrum communications. The RF gateways shall have a direct interface for communicating with a host computer. The RF gateways shall be provided with an IEEE 802.3/Ethernet interface card with a 10BaseT connector and shall implement TCP/IP addressing and shall provide Simple Network Management Protocol, and Management Information Base (MIB) I and MIB II reporting. The Contractor shall provide a Federal Information Processing Standard (FIPS 140) gateway solution to communicate securely with associated FIPS 140 Hand Held Bar Code Terminal Client. The gateway solution shall be a minimum: FIPS 140-2 Level 2 Compliant and Certified, accommodate 30 LAN-connected APs, accommodate 125 Remote APs, provide Wireless Intrusion detection and Licenses (if applicable), contain software to enforce role based access and security policies to each user or device, and 8 AP Licenses (if applicable). Gateway IA Solution procured must be on the Department of Defense Unified Capabilities Approved Products List (DoD UC APL) (<a href="https://aplits.disa.mil/processAPList.do">https://aplits.disa.mil/processAPList.do</a>). The gateway Information Assurance (IA) Solution shall be preloaded and configured on a hardware appliance device prior to delivery to the Government.

#### 4.7 TRANSIT CASES.

If additional transit cases are required in the future, contractor shall use best commercial practices in the design and manufacturer of the configured transit cases to protect the contained AIT-V equipment. The transit cases shall be rigid, stackable, lockable, suitable for rugged environments, reusable, and waterproof to protect AIT-V components during intermodal transport and storage. Transit cases shall protect AIT-V components from rugged environment damage resulting from dropping during cargo loading and unloading, and vibration and shock when transported as loose cargo over unpaved secondary roads. The transit case shall be flexible enough to absorb shock, yet durable enough to protect the contents from forces striking the case from any angle. Transit cases shall be equipped with automatic pressure-vacuum relief valves to accommodate differences in pressure from sea level up to an altitude of 40,000 feet.

#### 4.7.1 CONTENTS.

The Contractor shall provide Transit Cases that contain cutouts or molded cushioning to protect the contents from damage during transit and storage. AIT-V components contained within the Transit Cases shall not be affixed to the Case. The Transit Case cover shall be non-hinged and inserts shall be split so as to be an integral part of the top and bottom pieces of the case. Cushioning material used for cutouts or molded compartments shall be non-flaking, permanent, reusable, and attached to the Transit Case.

#### 4.7.2 INVENTORY LIST.

Each Transit Case shall have a durable, permanent inventory list of all AIT-V components in the case that includes: Nomenclature, Quantity of Each Component, Number of Cases per Configuration, and Graphic Packing Instructions. The Inventory list shall be affixed to the inside top cover and visible to the user.

# 4.7.3 TRANSIT CASE COLOR.

The Contractor shall provide Transit Cases in Olive Drab.

# 4.7.4 TRANSIT CASE SURVIVABILITY.

Transit Case materials shall be treated, or otherwise engineered to protect against Transit Case deterioration caused by moisture, mold, rot, ultraviolet radiation, industrial solvents, hydraulic fluids, petroleum products, and jet fuel. Transit Cases shall be compliant with the requirements identified in "Rugged Environment Certification". All metallic parts shall be corrosion-resistant.

# 4.7.5 HUMAN FACTOR SIZE, WEIGHT, AND DIMENSION LIMITATIONS.

The Contractor shall make every effort to minimize the weight, size, and number of Transit Cases for each Configuration. Transit Cases shall be able to fit through a 30-inch wide opening, such as a doorway. The weight of the Transit Case contents shall be evenly distributed between the Transit Case handles, with a low center of gravity when fully loaded or unloaded. The gross weight of the Transit Case plus contents shall not exceed 130 pounds. The use of the Transit Case cover for storage shall not make the cover inordinately heavy causing problems during the lifting or removal of the cover. The weight lifting limits per Transit Case shall not exceed those listed below:

a. One-person lift: 37 pounds;b. Two-person lift: 74 pounds; andc. Four-person lift: 130 pounds.

#### 4.7.6 HANDLES AND CLASPS.

The Contractor shall provide Transit Cases with a sufficient number of handles to facilitate movement by the specified number of personnel. All one-person and two-person lift Transit Cases shall have at least two handles. Transit Cases requiring a four-person lift shall have a minimum of two handles on each side of the case. Handles shall return to a closed position by a spring-loaded mechanism or a simple restraining mechanism when not in use. Handles and clasps shall be recessed, non-reflective, dark in color, non-corrosive, easily accessible, and operable by personnel wearing low-temperature protective gloves.

#### 4.7.7 IDENTIFICATION PLATE.

An Identification (ID) Plate shall be permanently affixed to each Transit Case. ID Plate lines, letters, numerals, and characters shall be permanent and legible in compliance with DoD Unique Identification Policy reference provided at Appendix A of the Policy. ID Plates and mounting provisions shall be resistant to abrasion, rain and salt spray, and common cleaning solutions. ID Plates shall not detach from the Transit Case when subjected to the elements and extreme temperatures. ID Plates shall have smooth edges, and shall be free of blisters, cracks, sharp corners, foreign matter, or any other defects. The ID Plate drawings shall be provided to the COR for approval prior to commencement of manufacture of ID Plates and the assignment of serial numbers. The Contractor shall assign a serial number to each Transit Case, and this serial number shall be included in the UID.

#### 4.7.7.1 ID Plate Dimensions.

Identification plate dimensions shall be no less than 1.75 inches wide by 3.0 inches long. The thickness for all identification plates shall be 0.03 inch, plus or minus 0.0005 inch, without backing material.

# 4.7.7.2 ID Plate Printing.

Letters printed on ID Plates shall be Gothic capitals, and numbers and characters shall be of similar appearance. The background color shall be black and the printed characters shall be white. Bar codes shall be on a white background with the bar codes printed in black.

#### 4.7.7.3 ID Plate Information.

As a minimum, the Government requires the following information on the ID Plate:

- a. Contract Number:
- b. Contractor And Government Entity (CAGE) Code;
- c. RESERVED;
- d. Nomenclature
- e. Transit Case Serial Number;
- f. Government ownership designation "PROPERTY OF THE U.S. GOVERNMENT"; and
- g. The UID of the Transit Case Group and Configuration shall be bar-coded in Data Matrix Symbology.

# 4.7.7.4 ID Plate Location.

Identification Plates on Transit Cases shall be located at the left or center of the exterior, vertical surface of the top portion of the Transit Case that is facing the user when the case is ready to be opened. An ID Plate shall also be affixed to the left or center of the exterior, vertical surface of the bottom portion of the Transit Case that is facing the user when the case is ready to be opened. Location of ID Plates shall be consistent for all Transit Cases.

# 4.7.8 TRANSIT CASE HEALTH AND SAFETY LABELS.

The Contractor shall label each Transit Case to inform users of health and safety considerations before moving or opening the Transit Case. Transit Case health and safety labels shall be placed horizontally (on the front of the case) and externally on the top of each Transit Case in a consistent manner. The health and safety labels shall identify:

- a. Gross or loaded weight;
- b. Volume in cubic feet and cubic centimeters;
- c. External linear dimensions in inches and centimeters;
- d. The number of persons required to lift the case (for example, "FOUR-PERSON LIFT") in accordance with the paragraph entitled "Human Factor Size, Weight, and Dimension Limitations" above;
- e. Any other considerations that may affect the health or safety of users attempting to lift, move, or open the Transit Case.

# 4.7.9 TRANSIT CASE CONFIGURATIONS.

If additional configurations are required in the future, Contractor shall provide Transit Case Configurations consisting of AIT-V equipment that meets all of the requirements as individually specified in this Statement of Work. The make and model of all items included in the Transit Cases specified shall be the same as the individual items listed in the contractor's AIT-V CLIN list, if applicable. If requested through a task order, the Contractor shall

request a National Stock Number (NSN) for each Transit Case Configuration by submitting a DD Form 61, Request for Nomenclature. The Contractor shall provide Transit Case Configurations that are grouped as defined in the following subparagraphs. Each Configuration shall be self-contained, and shall include all necessary adapters, cables and components, and commercial user manuals to operate worldwide. Recognizing that many countries have unique power plug designs, the Government will accept operation with the three plug types designed for use in Central Europe (Germany), North America (United States), and the United Kingdom (Great Britain) as fulfilling the requirement for Worldwide Operation. Most countries of the world conform to one of these plug types. Generally, the North American type plug is acceptable in North and Central America, Western South America, Japan, and parts of Korea. The Central Europe type plug is acceptable in most of Continental Europe and some of the Middle East and Africa. The United Kingdom type plug is acceptable in Great Britain, Ireland, Malaysia, and many countries in the Middle East and Africa. The Contractor shall consolidate applicable accessories with the associated primary component identified in a Transit Case. Commercial user manuals shall be provided in accordance with the paragraph entitled "USER MANUALS" and secured within appropriate width slot(s) within each Transit Case.

#### 4.7.10 SMALL ARMS ROOM TRANSIT CASE CONFIGURATION.

The Small Arms Room Transit Case Group shall be available for ordering on the AIT-V contract no later than 90 calendar days after the effective date of contract award.

The Small Arms Room Kit Transit Case Group shall at a minimum contain the following:

- a. One (1) Transit Case with foam inserts to support the below items;
- b. One (1) Bar Code Imager for Direct Part Marks as specified in Section 4.2.3;
- c. LCD touch screen display, minimum of 15";
- d. Portable laser document printer;
- e. Ruggedized Notebook Computer with Touch Screen Monitor;
- f. Mini Port Replicator;
- g. USB CAC Reader;
- h. Signature Pad;
- i. One (1) external back up hard drive with USB interface cable;
- j. One (1) Uninterrupted Power Supply (UPS);
- k. Packing lists for each case; and
- 1. Installation Manual & hardware manuals for individual products.

The Contractor shall provide a hard copy and electronic setup manual with the Small Arms Room Kit transit case that specifies the step-by-step instructions with illustrations for equipment connection, setup, and use. Each Notebook computer shall include an on-line tutorial application to provide the user with all information required to successfully install and operate the Kit.

# 4.8 SMALL ARMS ROOM KIT TRANSIT CASE CONFIGURATION.

- a. The Contractor shall provide a Small Arms Room notebook computer that shall at a minimum have a touch screen display, be a ruggedized, Industrially Hardened, dual-core processor, with a shock mounted and removable 80 GB Hard Disk Drive, 1 GB RAM, 1.2 GHz minimum processing speed, a CAC reader, and combination internal or external DVD-ROM and CDR/RW drive. The notebook computer shall meet or exceed the IP 54/IEC 60529 standard for sealed against water and dust intrusion. The notebook computer shall weigh no more than 7 pounds and shall be equipped with an additional outdoor viewable Point of Sale (POS) 15" LCD touch screen display for customer user data input to the Small Arms Room Kit notebook computer.
- b. The Small Arms Room Kit notebook computer shall be configured with the Microsoft Windows Vista or latest version Operating System (updated with the latest Service Pack). The Contractor shall Harden the OS to the DISA Field Security Operations (FSO) Security Content Automation Protocol (S-CAP) The POC at the Defense Information Systems Agency (DISA) for the Gold Disk is: disa.letterkenny.FSO.mbx.stig-customer-support-mailbox@mail.mil. The Small Arms Room Kit Notebook Computer shall be capable of hosting the Small Arms Room Management software described in "Small Arms Room Management Software" of this document.

#### 5 SOFTWARE AND FIRMWARE REQUIREMENTS.

The Contractor shall provide software that will operate on a variety of Government-owned workstations, and on AIT-V equipment provided under this Contract. The Contractor shall provide Bar Code Label and Form Design and Printing Software, and IUID Marking Integration Software. The Contractor shall provide all AIT-V software on CD-ROM or via electronic download. All AIT-V software shall include a perpetual license for use by the government. The Contractor shall participate in AIT-V Product Demonstration (Attachment 8), to provide the Government an opportunity to observe the Offeror's hardware and software products in operation, and to familiarize the Government with the various features of the Offeror's hardware and software products.

#### 5.1 BAR CODE LABEL AND FORM DESIGN SOFTWARE.

Bar Code Label and Form Design Software is a set of programs in one package that shall allow the Government user to design and print bar code labels and forms. The Contractor shall provide bar code label and form design and printing software with graphic function, as well as ISO 9075-3 SQL Call-Level Interface (open database connectivity). The software shall generate low, medium, high, and ultra-high Code 39 bar codes, as well as the other bar code symbologies listed in the paragraph entitled "Bar Code Symbologies." The software shall also generate DD 1348-1 and DD 1387 forms, and shall be designed to drive the provided bar code label printers. The Contractor shall provide software that allows rapid label and form design without having to learn the complexities of bar code symbologies and printer control languages, displays a "what-you-see-is-what-you-get" editor for designing bar code labels and forms, and allows viewing of bar code labels and forms prior to printing. The software shall also permit the use of fixed or variable data for label or form text and bar codes, and shall import information to be used with labels and forms from databases. The bar code label and form design and printing software shall execute under Microsoft Windows Vista or latest version Operating System (updated with the latest Service Pack). The software shall perform network printing, and no custom programming shall be required for use.

#### 5.2 SMALL ARMS ROOM MANAGEMENT SOFTWARE.

- The contractor shall provide commercial automated small arms room management software. The software shall use both bar code and data matrix-based AIT, including data matrix encoded unique item identifiers compliant with MIL-STD-130N, to automate processes related to all small arms and other serially managed items found in Army arms rooms. The automated processes shall include, as a minimum, issue, receipt, inventory, maintenance management, and ammunition management. The software shall assign specific serialized arms and accessories to specific soldiers and control issues based on those assignments. The software shall produce standard and ad-hoc management reports, an automatic data backup capability and document transactions on appropriate standard Army printed forms. Access to the system shall be CAC enabled. The software shall be deployable, and allow use of its full suite of capabilities in both garrison and in field environments such as the Army's National Training Center. The small arms room management software shall support the assignment and labeling of uniquely managed items not marked with standard unit item identifiers (UII) with machine readable temporary unique identifiers and associate items to their assigned serial numbers and to their UIIs, if assigned. For uniquely managed items lacking UIIs, the small arms room management software shall associate to temporary unique identifiers as well as providing an automated capability for the armor to issue and receive using electronic signatures and CACs. The small arms room management software shall allow performance of manual inventories and input of that data to the digital arms room module and manage non-standard weapons and sensitive items. The small arms room management software shall support continuity of operations by providing data backup and a process for data recovery. Provide an automated capability to restrict issue of weapons for administrative reasons.
- b. The Government requires the following functions and capabilities to be included in the small arms room management software. The additional functions are as follows: maintain a lifecycle history of items while managed by the system, including issues, turn-ins and maintenance; provide host Interactive Electronic Technical Manuals (IETM), to include ability to use all IETM features not requiring external communications; provide a capability to read and store information from all types of standard Army bar coded media and ECC200 data matrix symbology, employing the area imager in the keyboard wedge mode; maintain and track training information related to Soldier skill qualification on items in the arms room; provide warning when Soldier qualification doesn't match an item's skill qualification requirement; provide an intuitive user interface that requires minimal training; enable automated cyclic inventory scheduling; automate key control management; automate the production of weapons cards; provide a feature during system shut down that will alert the armorer to weapons pending return; provide automatic alerts for issued items not returned to the arms room as scheduled; automate functionality of current weapon key control registers, Standard Form 701, DA Form 3749, DA Form 2062 and DA Form 2404, key control for weapon racks and

trigger locks (Key Control Register and Inventory 5513-R); maintain a lifecycle history of items while managed by the system, including issues, turn-ins and maintenance.

#### 5.3 FIRMWARE REQUIREMENTS.

The Contractor shall provide necessary firmware as part of the equipment configuration of AIT-V contract components. Firmware shall reflect the baseline configuration and all subsequent Government-approved Engineering Changes. All firmware shall be installed prior to equipment delivery.

#### 6 SECURITY.

# 6.1 SECURITY STANDARDS.

All vendor solutions shall conform to the policies, requirements, and capabilities definitions for Unified Capabilities (UC), if/as applicable. UC compliant products must have completed Interoperability (IO) and Information Assurance (IA) certification and be posted on the UC APL (https://aplits.disa.mil). However, products offered on the AIT-V contract that do not fall into the scope of the Unified Capabilities Requirements (UCR) or fall into an existing product category, still shall meet all the requirements outlined in this IA section of the PWS. When product version updates are announced on the DoD UC APL the Contractor shall make available the updated version for their currently fielded HHTs and integrate onto the HHTs for new orders no later than 90 days after the product has been incorporated on the DoD UC APL. It is the Contractor's responsibility to monitor the UC APL to identify any required hardware or software additions and changes.

The Contractor shall comply with the following standards, and Government guidelines to include all new versions, amendments, and modifications made to the listed documents and standards, as applicable.

- a. Office of Management and Budget (OMB) Circular No. A-130 Revised, (Transmittal Memorandum No. 4) Management of Federal Information Resources – Appendix III, Security of Federal Automated Information Resources, 28 November 2002.
- b. National Institute of Standards and Technology (NIST) Federal Information Processing Standards (FIPS) Publication 140 2, Security Requirements for Cryptographic Modules, 25 May 2001, w Change Notices 12-03-2002.
- c. Department of Defense Directive (DoDD) 8100.02, Use of Commercial Wireless Devices, Services, and Technologies in the Department of Defense (DoD) Global Information Grid (GIG), Current as of April 23, 2007
- d. Assistant Secretary of Defense Memorandum, Use of Commercial Wireless Local-Area Network (WLAN) Devices, Systems, and Technologies in the Department of Defense (DoD) Global Information Grid (GIG), 02 June 2006
- e. Department of Defense Instruction (DoDI) 8417.01, Commercial Wireless Local-Area Network (WLAN) Devices, Systems, and Technologies, November 3, 2009.
- f. Department of Defense Directive (DoDD) 8500.01E, Information Assurance (IA), 24 October 2002, current as of April 23, 2007.
- g. Department of Defense Instruction (DoDI) 8500.2, Information Assurance (IA) Implementation, 06 February 2003.
- h. Department of Defense Instruction (DoDI) 8510.01, DOD Information Assurance Certification and Accreditation Process (DIACAP), November 28, 2007.
- i. Army Regulation (AR) 25-2, Information Assurance, 23 March 2009.
- j. Best Business Practice 09-EC-M-0010, Wireless Security Standards, Version 4.0, 26 June 2013.
- k. DFARS 252.239-7001, Information Assurance Contractor Training and Certification
- 1. Department of Defense Instruction (DoDI) 8420.01, Commercial Wireless Local-Area Network (WLAN) Devices, Systems, and Technologies, November 3, 2009.

After award, the Contractor may propose alternatives at no additional cost to the Government that meet or exceed the provisions of the listed standards.

#### 6.2 DOD INFORMATION ASSURANCE REQUIREMENTS.

All devices and/or systems provided by the Contractor that receive, process, store, display or transmit information shall comply with the applicable Information Assurance (IA) requirements specified in Department of Defense Directive 8500.01E Information Assurance (IA) and Department of Defense Instruction 8500.2, Information Assurance (IA) Implementation. Examples of systems which must meet these IA requirements include but are not limited to: stand- alone information systems; networked computers and servers; mobile computing devices such as laptops, handhelds, and personal digital assistants operating in either wired or wireless mode; and other information technologies as may be developed and/or proposed by the Contractor.

# 6.3 DOD WIRELESS DEVICE SECURITY REQUIREMENTS.

AIT-V implementations that utilize Institute of Electrical and Electronics Engineers (IEEE) Standard 802.11 Wireless Local Area Network (WLAN) products to store, process, or transmit unclassified information shall comply with the requirements specified in Department of Defense Instruction (DoDI) 8417.01, Commercial Wireless Local-Area Network (WLAN) Devices, Systems, and Technologies.

# 6.4 ARMY WIRELESS DEVICE SECURITY REQUIREMENTS.

Army AIT-V implementations that utilize Institute of Electrical and Electronics Engineers (IEEE) Standard 802.11 Wireless Local Area Network (WLAN) products or other wireless technologies to store, process, or transmit unclassified information shall comply with the applicable requirements specified in Army Regulation (AR) 23-2, Information Assurance and Army Best Business Practice 09-EC-M-0010, Wireless Security Standards.

# 6.5 COMMON CRITERIA COMPLIANCE REQUIREMENTS.

Common Criteria compliance is determined and verified by favorable product testing against a Common Criteria Protection Profile (CCPP). CCPPs are developed under sponsorship of the National Security Agency (NSA). Common Criteria tests are conducted by a Common Criteria Test Laboratory (CCTL) that has been approved and accredited by the National Information Assurance Partnership (NIAP). NIAP is a partnership agreement between NSA and the National Institute of Standards and Technology (NIST). Upon approval and adoption of a CCPP for AIT-V technology, for which no CCPP exists, the Contractor shall, no later than six months after the adoption of a relevant CCPP submit product(s) with documentation to a designated CCTL for Common Criteria testing. Subsequently, only products tested and compliant at the Medium Robustness level (as defined in the CCPP standard) shall be permitted through this Contract. Information regarding Common Criteria Compliance can be obtained from the following web site: http://www.commoncriteriaportal.org/.

# 6.6 SECURITY CERTIFICATION AND ACCREDITATION SUPPORT.

The Contractor shall support all Government efforts to obtain Certification and Accreditation (C&A) for the products provided under this Contract in accordance with the guidance contained in the Department of Defense Instruction (DoDI) 8510.01, DoD Information Assurance Certification and Accreditation Process (DIACAP) . In support of the Government's C&A activities, the Contractor shall provide copies in vendor format of component design specifications, component user manuals, and results of any security tests already completed. For testing in support of C&A, the Contractor shall provide the Government with access to Contractor personnel involved with design, engineering, operations, and security attributes of the products.

# 6.7 SECURITY MAINTENANCE SERVICES.

The Contractor shall ensure that the devices and/or systems provided under this contract comply with all new versions, amendments, and modifications made to the security documents and standards cited in this RFP, when applicable and commercially available. To ensure continued compliance, the Contractor shall perform the necessary configuration changes, as approved by the Government. These configuration changes may include, but are not limited to: performing system configuration changes, installing patches and bug fixes; conducting hardware/software upgrades, updates, and replacements.

# 6.8 GOVERNMENT EVALUATION.

The Contractor shall support Government compliance verification evaluation and security certification and accreditation of the products provided under this Contract. The Government will coordinate the scheduling of any evaluation with the Contractor. The Contractor shall cooperate with Government personnel and Government

representatives who plan, conduct, and report any Government testing. Support of Government testing, when requested, includes Government or its agents access to Contractor facilities, documentation, and/or personnel used by the Contractor to produce the products provided under this Contract. The Contractor shall assist in resolving any problems resulting from the Government verification evaluations and security certification and accreditation process. This shall address problem reports, technical investigations, and any testing performed.

#### 6.9 PRODUCT SOLUTIONS ON CONTRACT.

Upon Contract award, for products (CLINs) not currently on the UC APL, the Contractor will have 21 days to complete all documentation and submit to the Governing body the necessary paperwork to conform to the policies, requirements, and capabilities definitions for Unified Capabilities Requirements (UCR). Until such products have completed Interoperability (IO) and Information Assurance (IA) certification and be posted on the UC APL (https://aplits.disa.mil), the Government reserves the right to place these products (CLINs) on CONTRACT RESERVE. During the period of contract performance, any new products proposed, based on end-of-life issues or contract change proposal insertion will also conform to the same stipulation. In addition, post documentation submission, the PD AMIS COR will be given biweekly email updates regarding the status of the product (CLIN) posting on the UC APL until such time that it appears.

#### 7 MANAGEMENT.

# THE REQUIREMENTS STATED WITHIN THIS PARAGRAPH, WILL NOT BE SEPARATELY PRICED.

#### 7.1 PROGRAM MANAGEMENT

- a. The Contractor shall provide the following AIT-V Program Management activities and services:
  - Two-work day response to program issues and problems associated with the execution of the Contract as identified by PD AMIS;
  - 2. Support by means of Electronic Commerce/Electronic Document Interchange (EC/EDI), web access for Contractor-provided information and data;
  - 3. Maintain accurate records;
  - 4. Provide response within one workday to PD AMIS questions;
  - 5. Provide information to various Services and Agencies with the approval of PD AMIS;
  - 6. Receive and process customer Delivery Orders, purchase card orders, and Task Orders;
  - 7. Develop, update, and maintain the Ordering Catalog IAW CDRL K0001;
  - 8. Coordinate shipments and deliveries;
  - 9. Report order and delivery status;
  - 10. Provide the requisite warranty services required by this Contract;
  - 11. Maintain warranty records;
  - 12. Provide access for AIT-V Users to an identified customer support database location for this Contract. The database shall at a minimum contain information on delivery order/task order status, product support issues, such as recalls or problem reports, product safety, product news and other useful information for customers;
  - 13. Develop and execute a management plan that incorporates configuration management and risk management, and provide an AIT-V Management Plan;
  - 14. Schedule project reviews and internal seminars and conferences, and present Contractor's vision of new technology;
  - 15. Schedule and perform demonstrations at contractor's discretion;
  - 16. Conduct Project Progress Reviews (PPR);
  - 17. Provide Asset Management Reports (see Attachment 6) to include Warranty Status information;
  - 18. Provide Monthly Equipment and Service Reports (MESR);
  - 19. Report Contractor Manpower Information in accordance with the paragraph entitled "Contractor Manpower Reporting" within the PWS; and
  - 20. Ensure DoD Anti-terrorism policies are supported (see Section 16).

#### 7.1.1 POINTS OF CONTACT.

The Contractor shall provide a list of Contractor Point of Contact (POC) to the COR no later than ten workdays after the effective date of the Contract. The list shall include names, telephone numbers, facsimile numbers, e-mail addresses, and areas of responsibility for the AIT-V Contract. The Contractor shall notify the COR no later than five workdays of replacement of a point-of-contact.

# 7.1.2 AIT-V CONTRACT PROGRAM MANAGER.

- a. The Contractor shall identify to the Government a Program Manager for the AIT-V Contract. The Program Manager shall at no additional cost to the Government be available with a 24 hours notice to meet with the Government at PD AMIS facilities. The AIT-V Contract Program Manager shall address and resolve AIT-V programmatic issues, facilitate information exchange with the Government, and enhance management coordination.
- b. The Contractor's AIT-V Program Manager shall manage all Delivery Orders, Task Orders, and purchase card orders, and shall be the Contractor's authorized point-of-contact for the PD AMIS, the COR, and the point-of-contact for Delivery Orders, Task Orders and purchase card orders. The Contractor's AIT-V Program Manager shall be responsible for formulating and enforcing work standards, assigning schedules, and reviewing work discrepancies, communicating policies, purposes, and goals of the organization to the assigned Contractor personnel for performance of this Contract. The Contractor's AIT-V Program Manager shall manage Delivery Order and Task Order performance.

# 7.2 AIT-V MANAGEMENT PLAN.

The Contractor shall provide an AIT-V Management Plan. The Plan shall be submitted to the COR no later than 30 calendar days after contract award. The PD AMIS will either approve the Management Plan, or provide comments to the Contractor for incorporation into the Management Plan. The Contractor shall then have 10 workdays to incorporate the Government's comments into the Plan, and resubmit the Plan to the COR. The Contractor shall manage the contract in accordance with the Government-approved AIT-V Management Plan. The AIT-V Management Plan shall include, but not be limited to the following:

- a. Management and Reporting Methodology for Gathering, Validating and Generating Reports;
- b. AIT-V Configuration Management Plan;
- c. Risk Management;
- d. Repair Approach;
- e. Integrated Process Team (IPT) Methodology;
- f. Electronic Commerce and Electronic Data Interchange Methodology;
- g. Web Site Methodology;
- h. Training Development and Support;
- i. Technology Assessment and Control; and
- j. Logistics Support to include the Contractor's approach to satisfying unusual or surge requirements and to deal with crisis situations.

#### 7.2.1 INTEGRATED PRODUCT TEAMS.

The Contractor shall participate in technical discussions with the Government on AIT-V technical issues via Integrated Product Teams (IPTs) and provide minutes of the meetings no later than five workdays after each meeting. IPTs will be composed of Government representatives and support contractors from all functional disciplines, working together to identify and resolve technical issues. IPTs will also recommend courses of action to Government to make sound and timely decisions, build a successful and balanced program, and make maximum use of timely input from the entire Team, including customers and suppliers.

# 7.2.2 PROJECT PROGRESS REVIEWS.

a. The Contractor shall conduct Project Progress Reviews (PPRs) for Government personnel at a PD AMIS facility located in the National Capital Region. The PD AMIS will schedule the initial PPR. It is anticipated that the first PPR will occur no later than 90 calendar days after the contract award. Thereafter, PPRs shall occur on a monthly basis for the next twelve months of the contract, and quarterly thereafter, for the life of the contract. During each PPR, the Contractor shall present a PowerPoint presentation that addresses the following:

- a. Status of current technological substitutions and additions;
- b. Status of configuration and risk management activities;
- c. Status of Task Orders, Delivery Orders and purchase card orders, to include but not limited to, received and processed dates (listed by ordering agency), scheduled delivery date, and shipped date;
- d. Actions under warranty;
- e. Significant trends (quantities by CLIN, component reliability safety issues, problems, and recommended solutions);
- f. Minutes from the previous PPR;
- g. Activities determined to be of importance to the Government, such as unanticipated problems, and high visibility issues identified by the Government;
- h. Status of significant program events;
- i. Customer feedback;
- j. Agencies and organizations contacted and initiatives with each; and
- k. Reason for delinquent Task Orders, Delivery Orders, and purchase card orders.

b. The Contractor shall include in each review, a current organizational chart that includes the names and telephone numbers of all key personnel, and any key personnel changes highlighted. The key personnel for this Contract are Software Systems Engineer; Project Manager; and Senior Programmer performing on Task Orders and the Contract Program Manager. The Contractor shall prepare and coordinate with the COR, an agenda for all PPRs at least five workdays before a scheduled PPR. The Contractor shall provide the briefing charts to the COR electronically three workdays prior to the day of the PPR. The Contractor shall prepare and coordinate minutes of the PPRs with PD AMIS no later than five workdays after the PPR. Coordination shall be accomplished through electronic mail. Upon PD AMIS approval, the Contractor shall, no later than five workdays, post the minutes on the web site specified in the paragraph "Web Site" in this Part. The Contractor shall hotlink the web site to the PD AMIS web site.

#### 7.2.3 MONTHLY ASSET MANAGEMENT REPORT.

The Monthly Asset Management Report (MAMT) focuses primarily on equipment orders, obligations, and funding. The Contractor shall provide PD AMIS, the COR, and Contracting Officer with a Monthly Asset Management Report in Microsoft Office Excel format via electronic mail and post it on the Contractor's web site for on-line viewing and ad hoc inquiries by authorized Users. The initial MAMT shall be submitted covering the first month after AIT-V Transition and shall be provided no later than 10 calendar days after the end of each subsequent month e.g., January report is due by 10 February. Attachment 6 (Monthly Asset Management Report) identifies the mandatory fields/data required within the report. The contractor shall update the web-site in near real-time but no later than seven calendar days from the event associated with the data point/field.

# 7.2.4 CONTRACTOR MANPOWER REPORTING.

The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the Contractor shall report ALL Contractor manpower (including subcontractor manpower) required for performance of this Contract. The Contractor is required to provide all of the required information using the following web address: https://Contractormanpower.army.pentagon.mil. The required information includes: (1) Contracting Office, Contracting Officer, Contracting Officer's Technical Representative; (2) Contract number, including task and Delivery Order number; (3) Beginning and ending dates covered by reporting period; (4) Contractor name, address, phone number, email address, identity of Contractor employee entering data; (5) Estimated direct labor hours (including sub-Contractors); (6) Estimated direct labor dollars paid this reporting period (including sub-Contractors); (7) Total payments (including sub-Contractors); (8) Predominant Federal Service Code (FSC) reflecting services provided by Contractor (and separate predominant FSC for each sub-Contractor if different); (9) Estimated data collection cost; (10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the Contractor with its UIC for the purposes of reporting this information); (11) Locations where Contractor and sub-Contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on the website); (12) presence of deployment or contingency Contract language; and (13) Number of Contractor and sub-Contractor employees deployed in theater this reporting period (by country). As part of its submission, the Contractor shall also provide

the estimated total cost (if any) incurred to comply with this reporting requirement. The reporting period shall be the period of performance not to exceed 12 months ending September 30 of each Government fiscal year and shall be reported by 31 October of each calendar year. Contractors may use a direct XML data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a Contractor's systems to the secure web site without the need for separate data entries for each required data element at the web site. The specific formats for the XML direct transfer may be downloaded from the web site.

#### 7.3 CONFIGURATION MANAGEMENT.

# 7.3.1 AIT-V CONFIGURATION MANAGEMENT PLAN.

The AIT-V equipment shall be configuration-controlled, accounted for, and audited in accordance with the Government-approved AIT-V Configuration Management Plan. The Contractor shall provide the AIT-V Configuration Management Plan as an Annex to the AIT-V Management Plan, which shall be submitted to the COR for approval no later than 30 calendar days after contract award. The AIT-V Configuration Management Plan shall reflect best commercial practices and shall be in accordance with accepted industry standards. The Plan shall define those instances when the Contractor shall notify the Government of pending changes to the AIT-V Equipment Baseline Configuration. See guidance on configuration software changes provided in Section 7.3.9 Configuration Status Accounting.

#### 7.3.2 CHANGES AND MODIFICATIONS.

All OEM changes prior to Contract award shall be included in equipment provided under this Contract at no additional cost to the Government. The Contractor shall notify the Contracting Officer of all OEM-sponsored changes to any equipment provided on the Contract. All changes shall be provided to the Government at least 45 calendar days prior to implementation for evaluation and will be subject to the Contracting Officer's approval before the changed products may be placed on the Contract.

#### 7.3.3 CHANGES TO SOFTWARE.

The Contractor shall notify the Contracting Officer of all changes to the software and documentation provided under the Contract throughout the warranty period, including any software updates and upgrades (for example, bug fixes, new features, enhancements, and revisions) as they become available. Software changes are further defined as any software product and documentation which is provided for any other customer free of charge, or which the software manufacturer does not consider a new product. Changes to software or documentation (e.g., User Manuals) (including packaging and shipping) shall be provided at no additional cost to the Government.

# 7.3.4 NOTIFICATION OF SOFTWARE CHANGES.

The requirement for any software change involving a change to form, fit or function, is that the Contractor shall provide PD AMIS one copy of the changed software with documentation (e.g., User Manuals) for each affected software item previously accepted by the Government. After Government evaluation of the changed software, the Contracting Officer will notify the Contractor of the acceptance or rejection of the latest release. Software changes not involving a change to form, fit or function shall be provided to the Government on the Contract after notification is provided to the Contracting Officer.

# 7.3.5 CORRECTION OF SAFETY HAZARDS OR EQUIPMENT MALFUNCTIONS.

In accordance with commercial practices, the Contractor shall notify the Contracting Officer and PD AMIS of all OEM-sponsored changes to correct safety hazards or equipment malfunctions. The Contractor shall implement changes to correct safety hazards in accordance with commercial practices. The implementation shall be in accordance with a mutually agreed-upon schedule. All such changes shall be implemented at no additional cost to the Government.

#### 7.3.6 CONFIGURATION AUDITS.

The Government is required to maintain configuration control over functional and performance requirements (form, fit, and function). Subject to the issuance of a TES Task Order, the Contractor shall support the Government in performing Functional Configuration and Physical Configuration Audits. The Contractor shall provide a demonstration of the equipment. At least seven workdays prior to commencement of the equipment demonstration, the Contractor shall deliver a Demonstration Plan to the Government. The Plan shall include the agenda,

demonstration procedures, and a matrix identifying the baseline equipment. The baseline matrix shall include, at a minimum: Equipment Nomenclature, Model Number, Firmware Version, Software Version, Relevant Specification Paragraph, and any constraints. The matrix shall be in Microsoft Office Excel format.

#### 7.3.7 PHYSICAL CONFIGURATION AUDIT.

A Physical Configuration Audit (PCA) is the formal examination of the "as-built" configuration of a commercial item against its technical documentation to establish or verify the commercial item's product baseline.

# 7.3.8 FUNCTIONAL CONFIGURATION AUDIT.

A Functional Configuration Audit (FCA) is the formal examination of the functional characteristics of a configuration item to verify that the item has achieved the requirements specified in its functional and allocated configuration documentation. The FCA is performed by the Government's Configuration Management Team or Quality Control Representative, by auditing the requirements specifications against the AIT-V Contractor specifications of each configuration item (hardware, middleware, and software).

# 7.3.9 CONFIGURATION AND STATUS ACCOUNTING (CSA)

Configuration status accounting is one of four functions associated with Configuration Management. It is considered to be the recording function of Configuration Management. Configuration status accounting involves creating and organizing a knowledge base of information necessary to manage configuration effectively. Therefore, its purpose is to provide a reliable source of configuration information that is required for Configuration Management and to support other program activities, such as program management, systems engineering, manufacturing, software development and maintenance, logistics support, modification, and maintenance. Some of the ends Configuration Status Accounting tries to accomplish within Configuration Management are

Provide traceability of configuration baselines and changes.
Collect and document data concerning Configuration identification, such as proposed changes and
approved changes.

AIT-V vendors are responsible for the maintenance of all Configuration Status Accounting (CSA) records regarding configuration to AIT-V software/firmware, i.e. versions and revision level changes.

According to Section 7.3.3 the contractor shall notify the KO of all changes to the software and documentation provided under the Contract throughout the warranty period, including any software updates and upgrades.

The PMO would like to give further clarification on how the contractors are to notify and track the software version and revision changes that will occur throughout the life of the contract.

Section 7.3.1 Requires that the Configuration Management Plan define those instances when the contractor shall notify the Government of pending changes to the AIT-V Equipment Baseline Configuration. This was not addressed in the draft Configuration Management Plan provided to the Government. It will be dependent on if it is a version change or revision change.

The PMO defines a <u>version change</u> as major change to software identified to the left of the decimal point. For example, Microsoft Win Mobile 6.0 changing to Win Mobile 7.0 would be a major version change and require a Contract Change Proposal.

The PMO defines a <u>revision change</u> as a minor change to software identified to the right of the decimal point. For example, Microsoft Win Mobile 6.0 change to 6.1 or 6.2 would be a minor revision change and would require PM office approval.

In order to have consistency for notifying and tracking version changes, we would like to ensure that the method is configuration status accounting is detailed in the Configuration Management Plan.

The method for notifying the Government for revision changes is the same requirements defined in the Section 7.3.4. It is important that the contractor understand that notification is to be sent via e-mail to everyone on the email distribution list and getting an e-mail response approving the revision changes before implementing.

As part of configuration management, the contractors should have a method established that tracks the changes made to software and documentation. The method of conducting the configuration management and status log for tracking the changes should be outlined in the configuration management plan. The PMO requests the status log be placed in the beginning of the Ordering Catalog (CDRL K0001) with the baseline software and subsequent revisions tracked. It is important that the information about the version changes and revisions be available on the contractor's website, so customers can verify current software versions and see if their software has had any updates.

The Configuration Status Accounting Report maintains records of the configuration status of all configuration items that have been placed under project level or higher configuration control. These records shall be maintained for the life of the contract. They shall include, as applicable, the current version/revision/release of each entity, a record of changes to the entity since being placed under project level or higher configuration control, and the status of problem/change reports affecting the entity.

The CSA log for change proposals will contain the following elements as a minimum:

- (1) Contractor Change proposal number.
- (2) Change proposal title.
- (3) Submission date.
- (4) Current software name and version/revision number
- (5) Proposed software name and version/revision number
- (6) Reason and Description of Change and identify any Baseline- documents affected
- (7) Change Impact on legacy equipment i.e. identify any compatibility, interoperability, or logistic support issues.
- (8) Proposal Implementation (as/if required)
- (9) Implementation Cost.
- (10) Contract Line Item Number(s) to which the change relates
- (11) Is the CI in production? If "yes", provide information as to whether deliveries have been completed on the contract(s).
- (12) If the proposed change is an interim solution, it shall be so stated.

<u>Reporting</u>. The CSA database shall be updated as modifications are received and in accordance with the Performance Work Statement. This database will be accessible (read only) by users via the LAN.

#### 7.4 RISK MANAGEMENT.

Risk Management is an essential part of program management. The Contractor shall continually identify, assess, manage, and control project risks. The objective is to reduce program uncertainties, and to classify risks according to their probability of occurrence, and possible consequences. In accordance with the Government-approved Management Plan, the Contractor shall identify project risks or actions that affect the accomplishment of program objectives. The program risk events include, but are not limited to:

- a. Technical performance;
- b. Operational performance;
- c. Schedule performance;
- d. Training;
- e. Technical standards; and
- f. Logistics readiness.

The Contractor shall prioritize project risks and determine the status of risk reduction or mitigation efforts. The Contractor shall report the status of risk management efforts during the PPRs.

# 7.5 MONTHLY EQUIPMENT AND SERVICE REPORT.

The Monthly Equipment Status Report (MESR) focuses primarily on equipment problems/issues, resolution, and tracking of assets under repair. The Contractor shall provide PD AMIS, the COR, and Contracting Officer with a Monthly Equipment and Service Report (MESR) in Microsoft Office Excel format via electronic mail and post it on the Contractor's web site for on-line viewing and ad hoc inquiries by authorized Users. The initial MESR shall be submitted covering the month the first AIT-V item is received by the Contractor for warranty, and shall be provided no later than 10 calendar days after the end of each subsequent month e.g., January report is due by 10 February. Attachment 7 (Monthly Equipment and Service Report) identifies the mandatory fields/data required within the report. The Contractor shall update the web site in near real-time but no later than seven calendar days from the event associated with the data point/field.

#### 7.6 CONTRACT-LEVEL METRICS.

The Government will evaluate the Contractor's performance at the contract level based on Attachment 5, Contract-Level Metrics. Task orders issued under this contract will contain specific metrics that the Contractor shall meet.

#### 7.7 EOUIPMENT RETURN AND TRACKING.

The Contractor shall affix a label to all hardware items deemed appropriate by the Government offered under the AIT-V Contract that states the Contractor's name, help desk phone number and website for warranty tracking. The Contractor shall provide a method to enable the Government User and the Contractor to quickly identify and track components being forwarded to, and returned from, the Contractor for warranty services. The Contractor shall assign the User an RMA number prior to the Government mailing in the failed equipment for repair or replacement. The User shall be informed of the RMA number and serial number of each component returned to the Contractor for warranty service. All failed equipment returned to the Contractor shall be identified by the RMA number. The RMA number will be used by the Government to help track the failed component through the warranty process.

#### 8 CUSTOMER SUPPORT.

# THE REQUIREMENTS STATED WITHIN THIS PARAGRAPH, WILL NOT BE SEPARATELY PRICED.

#### 8.1 TECHNICAL ASSISTANCE.

The Contractor shall provide Technical Assistance, as follows:

- a. Troubleshooting and correction of equipment problems;
- b. Processing requests for On-call warranty service;
- c. Processing Mail-in warranty service issues; for example, assigning RMA numbers; and
- d. Providing Contractor address for repair/warranty processing.

# 8.1.1 TOLL-FREE CUSTOMER SUPPORT HELP DESK.

The Contractor shall provide toll-free telephonic support for a Customer Support Help Desk in CONUS and OCONUS. The Help Desk shall be staffed 12 hours a day, 0700 EST to 1900 EST, seven (7) days per week, except when U.S. Government holidays and OCONUS Host Nation holidays coincide. The Help Desk shall respond to the User's call no later than four (4) business hours after receiving the User's call 95 percent of the time, maintain a database of calls received and acted upon, and track User calls for troubleshooting assistance. Except for the purpose of leaving a phone number for the Contractor to return a call no later than one hour during periods of high call volume, recorded answering services are not acceptable to the Government; however, the Contractor may use an on-line knowledge base, and an on-line RMA input functionality to assist Help Desk staff meet the workload. Contractor personnel staffing the Customer Support Help Desk shall possess sufficient expertise to recommend troubleshooting procedures and possible corrective actions for equipment and software acquired under the AIT-V Contract. Contractor personnel staffing the Help Desk shall understand and speak fluent English. The Contractor shall maintain records of User calls for troubleshooting assistance capturing the following: failed item Point-of-Contact, location, date, problem, and resolution. This information shall be provided in the MESR.

#### 8.1.2 WEB SITE.

The Contractor shall establish and maintain a worldwide web site for Government Users no later than 60 calendar days after the contract award. The web site shall be hot linked to the PD AMIS web site and shall be available daily on a 24-hour basis, until the expiration of the last active Order issued under the Contract. As a minimum, the Web site shall include, or provide hotlinks to:

- a. Methods for User to track status of Delivery Orders and Task Orders using the Government's order number and a Unique Control Number;
- b. Warranty support;
- c. Warranty service tracking using the RMA number;
- d. Exchange of technical information between the Contractor and individual User and groups;
- e. Point-of-Contact, telephone and facsimile number, email address and mailing address for each RC;
- f. Technical troubleshooting support;
- g. Failed equipment tracking and status;
- h. Ordering Catalog (CDRL K0001);
- i. Reference and User Manuals (i.e., Commercial Manuals, Technical Manuals, Software Manuals);
- j. Project management reports (e.g., schedules, IPT and PPR minutes, etc.);
- k. Recent news items from PD AMIS or the Contractor (e.g., notifications of the web site being down for maintenance, etc.);
- 1. Other data as mutually agreed to by the Government and the Contractor;
- m. AIT-V device drivers;
- n. Monthly Equipment and Service Report and Monthly Asset Management Report; and
- o. List of products that fully comply with Section 508 of the Rehabilitation Act.

The Contractor shall ensure that all device drivers required to operate AIT-V equipment are posted to the web site. At a minimum, the Contractor shall post to the web site those drivers that were developed by the Contractor for use under the Contract. All initial drivers shall be posted to the web site no later than 60 calendar days after the contract award. New and updated drivers shall be posted to the web site no later than 48 hours of the COR's approval. In the event that drivers are updated, the original version shall also be maintained on the web site.

#### 8.2 WARRANTY SUPPORT.

The Contractor shall repair or replace all failed AIT-V components covered under warranty in this Contract in accordance with the procedures outlined below. The Contractor shall immediately notify the ordering Contracting Officer and order POC regarding equipment requiring repair or replacement due to apparent User abuse, negligence, or missing significant parts, such as circuit cards or boards.

The warranty shall not apply if damage to the equipment is occasioned by fault or negligence of the Government. During the equipment warranty period, the Contractor shall implement changes to correct equipment malfunctions in accordance with best commercial practices. The implementation shall be in accordance with a mutually agreed-upon schedule. These changes shall be made at no additional cost to the Government. The warranty shall fully protect the Government against equipment malfunctions due to material defects, workmanship, or intrinsic operating problems. The warranty period for items ordered by Delivery Order shall begin upon Government acceptance of the equipment. In the event the Contractor is authorized to use a Certificate of Conformance, the warranty period for items ordered by a Delivery Order shall begin on the date of shipment. The warranty period for items ordered by purchase card shall be in accordance with the paragraph entitled "Government wide Commercial Purchase Card" within Section H of the RFP. The warranty shall include mail-in procedures and on-call procedures as specified below.

#### 8.3 WARRANTY MAIL-IN PROCEDURES.

The requirement for warranty mail-in service, including commercial carriers, is that the Contractor shall bear all shipping costs, both from and back to Government sites. The Contractor shall be responsible for the equipment from the time of receipt until safe return to the Government. The Government will provide the Contractor with any unusual transportation instructions for return shipment after repair. When the user does not require the same serial number equipment, the Contractor shall ship a replacement item no later than 24 hours after notification of failed AIT-V components. If the User requires the same serial number equipment, the Contractor shall restore all malfunctioning equipment covered under warranty to a fully operational condition and ship the equipment back to

the User no later than ten (10) workdays after receipt of the failed equipment (CONUS and OCONUS). In the event a same serial number component requested by the User cannot be repaired, the Contractor shall notify the Government User no later than three workdays after receipt of the component at the Contractor's facility. AIT-V returned warranty items marked with an IUID that require change of custody must be coordinated with the customer and reported to the DoD IUID Registry by the Contractor. The Government User will provide the Contractor with disposition instructions for un-repairable AIT-V components.

#### 8.4 COMPONENT RETURN AND TRACKING.

The Contractor shall assign a RMA number and inform the User of the RMA number as the tracking number, and serial number for each AIT-V component returned to the Contractor for warranty service.

#### 8.5 WARRANTY REPLACEMENT PARTS.

The requirement for Contractor Warranty service is that only new parts, or parts warranted as new by the OEM, shall be used for repairs of failed Government AIT-V components. Additionally, all replacement parts shall be equal to or better than the replaced parts in terms of quality and performance. The warranty for all replacement items installed during the initial warranty period shall be equal to the remaining warranty period for the original item, or 90 calendar days, whichever is greater. Failed parts replaced by the Contractor shall become the property of the Contractor. However, the Government reserves the right to purchase unserviceable parts containing sensitive or classified material, as required by statute or regulation.

#### 8.6 WARRANTY ON-CALL PROCEDURES.

The Contractor shall provide on-call warranty service for AIT-V IUID Marking equipment in CONUS only. The requirement for CONUS locations is that the Contractor shall provide on-call repair no later than three workdays of notification. The Contractor shall provide on-call warranty service outside the official hours of operation when required by the using activity. When warranty service outside the official hours of operation is ordered in CONUS locations, the Contractor shall replace or return the equipment to a fully operational status no later than five calendar days from the time the Contractor is notified of the malfunction. The Contractor shall provide On-call Warranty service support to repair the item on-site.

#### 9 MAINTENANCE.

#### 9.1 SOFTWARE MAINTENANCE.

Software maintenance shall be provided for all commercial software provided under this Contract in accordance with customary commercial software maintenance terms and conditions offered to the general public to include all fixes, updates and changes necessary to maintain the software in an operational state.

### 9.2 PREVENTIVE MAINTENANCE.

Preventive maintenance includes all actions performed in an attempt to retain an item in a specified condition by providing systematic inspection, detection, and prevention of potential failures. Unless otherwise specified, Government personnel will perform all preventive maintenance for items acquired under this Contract. The Contractor shall provide to the Government, in detail, all requirements and procedures for preventive maintenance and troubleshooting-level diagnostics, in documentation and User Manuals. The Contractor shall provide Material Safety Data Sheets to the Contracting Officer, COR and all users as specified in the individual order in accordance with FAR Clause 52.223-3 within the RFP. The Contractor shall provide documentation for each appropriate hardware CLIN that shall include preventive maintenance checks, service schedules, and troubleshooting-level diagnostics. The Contractor shall be responsible for all other maintenance and support.

### 10 TECHNICAL ENGINEERING SERVICES (TES).

#### 10.1 GENERAL.

The Contractor shall provide TES on-site at Government sites and at the Contractor's facility as specified in the Task Order. TES shall include those services required for AIT-V turnkey implementation, IUID implementation support, equipment integration, site analysis, installation, de-installation, relocation, problem-solving, user unique

training, IPT support, conducting PCAs/FCAs, software development; communications, interfaces to other Government systems, equipment and systems engineering services, System Design and systems integration to include middleware integration to enterprise systems. Any cables or adapters not listed in this Contract, middleware or other items and materials required for installation of Contractor-provided AIT-V components, may be ordered through the contract in accordance with the provision entitled "Incidental Materials" within Section H of the RFP.

#### 10.1.1 PROPOSAL REQUEST FOR TES.

The Government will issue proposal requests for TES in accordance with Section H of the RFP, paragraphs, "Ordering Procedures for Orders Exceeding \$3,000," and "Task Order – Technical Engineering Services (TES)." The Contractor is encouraged to respond to all proposal requests by the specified submission dates. Proposals submitted in response to a proposal request shall comply with the requirements of Section H of the RFP.

#### 10.1.2 TRAVEL.

Prices for Contractor personnel travel and per diem to perform TES shall be in accordance with the requirements set forth in "Task Orders – Technical Engineering Services" within Section H of the RFP.

#### 10.1.3 TES TRIP REPORT IAW CDRL J0001.

The Contractor shall submit a TES Trip Report to the Task Order POC or Task Order COR no later than five workdays after the completion of each trip made for TES. The trip report shall be in the Contractor's format and shall contain as a minimum:

- a. Report Date;
- b. Customer Name, address, POC, e-mail address, and telephone number;
- c. Project Name;
- d. Time arrived, time departed;
- e. Any recommended or provided Incidental Material description;
- f. Contractor's summary of work completed; and
- g. Contractor POC name and signature.

#### 10.1.4 TES RESPONSE TIME.

The Contractor shall provide TES within the time specified in the Task Order for specific technical services. The on-site locations and objectives of the TES to be provided shall be stated in the Task Order.

#### 10.1.5 SOFTWARE DEVELOPMENT SERVICES.

Software Development Services (SDS) shall be limited to development incidental to the AIT-V-related mission that utilizes equipment acquired under this Contract. The AIT-V SDS shall be limited to the development work required to implement, modify, interface, and integrate an AIT-V application(s) to an existing Government application(s) and database(s) e.g., Standard Army Retail Supply System (SARSS), Transportation Information System (TIS). Services include new software development, which may include translation of existing Government code that has been determined necessary to ensure operation of the system.

#### 10.2 INSTALLATION / DE-INSTALLATION / RELOCATION.

#### 10.2.1 INSTALLATION/DE-INSTALLATION/RELOCATION.

The Contractor shall conduct Installation/De-installation/Relocation services as specified in the Task Order for each location requiring the services. The ordering contracting officer will issue proposal requests with schematic drawings of the Government site. Additionally, AIT-V Contractors submitting TES proposals may conduct site surveys at their own expense or at AIT-V Contractor's own discretion rely solely on the Government-furnished site information when formulating their proposals. The Government does not guarantee accuracy and completeness of the Government-furnished site information.

#### 10.2.2 INSTALLATION/DE-INSTALLATION.

The Contractor shall install and de-install AIT-V configurations as specified in the Task Order. The Contractor shall provide all necessary installation support equipment, cables for the interface of the various components forming an installation, including the AIT-V devices, servers, peripheral devices, and power sources as required. Upon receipt of a Task Order requiring installation/de-installation, and in accordance with the schedule contained therein, the Contractor shall install/de-install AIT-V equipment in accordance with the approved Installation Plan. In instances where work to be performed by the Contractor requires interaction with existing facilities and equipment, the Contractor shall be responsible for any damage to existing facilities or equipment. After installation is completed, the Contractor shall remove all packing, shipping, and storage materials left over from the installation.

#### 10.2.3 RELOCATION OF AIT-V COMPONENTS.

Upon receipt of a Task Order requiring relocation of AIT-V equipment, and in accordance with the schedule contained therein, the Contractor shall install AIT-V equipment in accordance with the approved Installation Plan. The extent of the services performed by the Contractor shall be specified in the Task Order and may vary from minimal involvement to total responsibility for the relocation.

#### 10.2.4 INSTALLATION PLANS.

The Contractor shall submit an Installation Plan with supporting documentation and attachments for evaluation as a part of its proposal for TES. The Installation Plan shall include, but is not limited to, the following items:

- a. Specific details of the methodology for the installation and the resources required;
- b. Detailed description, by major subheadings, of all installation work to be accomplished by the Contractor at the site to include scheduling and dependency of the various tasks;
- c. Site layout plan including detailed drawings of all AIT-V components, such as racks, cabinets, or consoles;
- d. General component specifications including equipment, physical specifications, templates, manufacturer's specific machine configuration and space requirements, special operational line-of-sight requirements between various components, lighting requirements, site construction requirements, power requirements, cabling requirements, network connections, communication lines including satellite communications, cooling requirements, shipping requirements, and all special requirements that do not fall under normal operating conditions; and
- e. Description of any actions, such as site modifications, which the Government will complete prior to installation of the AIT-V equipment, in sufficient detail to facilitate successful installation of the equipment.

#### 10.3 CONTRACT SUPPORT PERSONNEL.

The Contractor shall provide all technical labor categories described in Attachment 2, Labor Category Descriptions. The Government will issue proposal requests for specific tasks to be performed under Task Orders. Personnel performing TES and training under this Contract shall posses the qualifications that the Contractor requires for, and be part of the same work force, providing such services to the general public. The Contractor shall provide labor categories that represent a blend of demonstrated technical, supervisory and managerial expertise, analytical skills and knowledge to provide specific tasks, using efficient and state-of-the-art processes, made up of functions including, but not limited to, the following:

- a. AIT-V component integration;
- b. Installation and de-installation;
- c. User unique training, on-site or classroom;
- d. Systems integration;
- e. Complex programming support;
- f. Designing, developing, and troubleshooting complex applications;
- g. Modeling simulation;
- h. Analysis in designing operating systems utilities;
- i. Troubleshooting, following established testing procedures to ensure equipment is operating properly;
- j. Development and revision of technical documentation for software, hardware, and systems;
- k. Testing online documents for correct operation, content and usability;
- 1. Analyzing systems to identify project objectives and data elements;

- m. Preparing high level flow-charts and diagrams from which detailed program designs may be further developed;
- n. Database management, associated data analysis and design, and data dictionary tools, as well as distributed systems, and data base development methods and techniques;
- o. Total system development and integration efforts, including all equipment, software, telecommunications, and networks, based on expert knowledge of automatic identification and data capture fields;
- p. Outlining problems, and providing solutions to data communication projects and problems based on expert knowledge of modern data transfer methods and networks; and
- q. Technical problem analysis and resolution based on expert knowledge of RF equipment and systems, wireless technologies, and wireless test procedures requirement analysis.

#### 11 DOCUMENTATION REQUIREMENTS.

#### 11.1 GOVERNMENT RIGHTS

The Government shall have full and unrestricted rights, in accordance with copyright laws and regulations, to use and reproduce for its own use, all documentation provided under this Contract. The Contractor shall provide the AIT user community with online access to, including the capability to download, all User Manuals and software reference documentation for any piece of equipment that interfaces with a host computer system. User Manuals and software documentation shall be in English and in the Contractor's format using Portable Document Format (PDF) files.

#### 11.2 COMMERCIAL USER MANUALS.

The Contractor shall provide a Quick-Start Guide for each piece of equipment that provides step-by-step procedures for major functions performed by the equipment. Equipment User Manuals shall identify all equipment functions, preventive maintenance tasks and troubleshooting procedures. Equipment User Manuals shall not be separately priced and electronic copies shall be available to download from the Contractor and/or OEM web site.

#### 11.3 SOFTWARE REFERENCE DOCUMENTATION.

The Contractor shall provide software reference documentation for use by software developers creating AIT-V applications for all software offered in hard copy and for online access. The documentation shall contain specific details for the integration of AIT-V equipment. The documentation shall be at a level of detail sufficient to fully define the operator interface and application operations. The software reference documentation shall not be separately priced.

### 12 PRODUCT AND SERVICES ORDERING CATALOG (CDRL K0001).

#### 12.1 PURPOSE.

- a. The Contractor shall provide a Product and Services Ordering Catalog (OC) (CDRL K0001) to assist Government users in determining the system configuration that shall best meet their operational requirements. The Contractor shall provide the OC no later than 90 calendar days after contract award.
- b. The Contractor shall provide a draft OC electronically to the COR, PD AMIS, and Contracting Officer for review no later than 30 calendar days after contract award. The Contracting Officer will either approve the OC or provide comments to the Contractor for incorporation into the OC. The Contractor shall then have no more than 15 workdays to edit and return the OC based on Government comments. Upon Government acceptance and approval by the Contracting Officer of the draft, the Contractor shall post the OC on the Contractor's web site.
- c. The initial OC shall be approved by the Contracting Officer prior to posting the OC on the Contractor's web site. Subsequent revisions resulting from a formal contract modification shall be posted to the web site no later than five workdays after issuance of the contract modification. The Contractor shall update the OC for other changes (e.g., Government point of contacts) no later than five workdays after the receipt of a request from the COR. The Contractor shall post Contractor-related changes no later than five workdays after the change.

### 12.2 FORMAT.

The OC shall be provided in sections for ease of use. The Sections shall provide a user with a complete product list, with detailed description of features and prices for ordering of all hardware, software, cables, documentation, training, and technical services provided. The OC shall also include Sections, which provide information on warranty, preventative maintenance, ordering procedures, customer support, and CLIN list with prices, and other support services. The Contractor shall provide access for Government users to the approved OC via the World Wide Web.

#### 12.3 SECTIONS.

Each section of the OC shall be technically accurate and complete with descriptions of the equipment (to include pictures), software, and services. CLINs shall be used throughout the document to allow the user to properly identify the appropriate item. CLINs shall be clearly annotated on drawings, charts, product descriptions, specification sheets, etc. When a product requires the purchase of additional CLINs to make a complete workable product, the CLINs shall be clearly identified in the description. All references to a geographic area where products may, or may not, be used shall be clearly annotated in the description, when applicable. The OC shall include, but not be limited to, the Sections identified below which address the minimum requirements in each Section.

#### 12.3.1 ORDERING PROCEDURES.

This section shall contain procedures that provide the user with all the necessary information required to order AIT-V products and services.

#### 12.3.2 EQUIPMENT.

The Equipment section shall be organized into sub-sections based upon the major types of equipment provided, and shall include a discussion of the main features of each piece of equipment, including physical dimensions, power requirements (wattage and voltage), and heat generated by equipment. Precautions, such as the minimum distance between various devices, shall be provided. All cable requirements for equipment installation shall be described in the Section titled "Cables." This Section shall clearly indicate the appropriate cables and interfaces for the various AIT-V components and provide a reference to the applicable parts of the Section titled "Cables". The OC shall contain instructions for users to specify equipment destination to ensure the AIT-V equipment is compatible with the commercial power supply and adapter plugs for the geographic area in which it shall be operated.

#### 12.3.3 SOFTWARE.

This Section shall provide a full description of all software packages that includes the primary function, minimum memory requirements, program capabilities, and major features and benefits. This section shall explain, in non-technical terms, the recommended software packages for specific applications.

#### 12.3.4 CABLES.

This Section shall list all provided cables, and equipment cable requirements in a chart format that shall allow the user to identify the correct cables for connecting AIT-V devices. CLINs shall be provided on the chart.

#### 12.3.5 TECHNICAL ENGINEERING SERVICES.

This Section shall contain procedures that provide the user with all necessary information required to order TES. All TES identified in the paragraph entitled "Technical Engineering Services" shall be addressed in this Section.

#### 12.3.6 TRAINING.

This Section shall provide course descriptions, lengths, prerequisites, course objectives, and recommended audiences for each Training Course.

#### 12.3.7 WARRANTY SUPPORT.

This Section shall address the warranty provisions of the Contract.

#### 12.3.8 PREVENTATIVE MAINTENANCE.

This Section shall describe the various preventative maintenance procedures.

#### 12.3.9 CLIN LIST AND PRICES.

This Section shall provide the CLIN List and Prices.

#### 13 CERTIFICATIONS.

#### 13.1 ENERGY STAR.

Equipment meeting the specifications defined in PB 95-250304 shall be certified by the Contractor and properly labeled as meeting the Environmental Protection Agency requirements.

#### 13.2 NONINCENDIVE CERTIFICATION.

The Contractor shall certify that equipment identified as Nonincendive as well as its sub-components, shall be designed, manufactured and tested to Nonincendive standards, as specified in the National Electrical Code.

#### 13.3 RUGGED ENVIRONMENT CERTIFICATION.

Transit Cases shall be manufactured and tested in accordance with ATA Specification No. 300, "Packaging of Airline Supplies" - 1960 (R2008) for Category 1, or have previously been accepted by DoD for use in a rugged environment.

### 13.4 PRODUCT SAFETY CERTIFICATION.

Equipment shall be certified by an authorized, Nationally Recognized Testing Laboratory to UL 60950.

#### 13.5 TRADE AGREEMENTS ACT.

The Contractor shall certify that applicable equipment conforms to the Trade Agreements Act.

#### 13.6 ELECTROMAGNETIC COMPATIBILITY (EMC) COMPLIANCE.

All applicable equipment shall meet, as appropriate, the requirements of National Telecommunications and Information Administration (NTIA) Manual Annex K and FCC Part 15, regulations for Government operations. In order to certify the use of commercial AIT-V equipment in these environments, the Government will subject representative categories of equipment to radiated emission and susceptibility tests (See MIL-STD 461D: Requirements for the Control of Electromagnetic Interference Emissions and Susceptibility, and MIL-STD-462D: Measurement of Electromagnetic Interference Characteristics). The applicable equipment shall remain unchanged after installation of Contractor-provided radio frequency devices. All applicable equipment for CONUS shall meet the International Special Committee on Radio Interference (CISPR) 22, Class A (International) standards for Radio Frequency Interference/Electromagnetic Interference, and be Underwriters Laboratory (or equivalent) and European Community certified. The Contractor shall test and certify equipment per the guidance provided in the U.S. Department of Commerce NTIA, FCC, and International Standards.

#### 13.7 SELF-CERTIFICATION.

The Contractor's self-certification of standards (e.g., IEEE 802.11) shall be based upon the results of testing or inspection the Contractor undertakes or authorizes others to undertake on the Contractor's behalf. The Contractor's criteria and procedures to declare, on its own authority, that a product or service is in conformity with specified standards or specifications shall be performed in accordance with ISO/IEC 17050-1:2004, Conformity Assessment — Supplier's Declaration of Conformity — Part 1: General Requirements, and ISO/IEC 17050-2:2004, Conformity Assessment — Supplier's Declaration of Conformity — Part 2: Supporting Documentation.

# 13.8 DEPARTMENT OF DEFENSE (DOD) UNIFIED CAPABILITIES (UC) APPROVED PRODUCTS LIST (APL).

The Department of Defense (DoD) Unified Capabilities (UC) Approved Products List (APL) Process is developed in accordance with DoD Instruction 8100.04. The UC APL Process is managed by Defense Information Systems Agency (DISA) – Network Services (NS) Unified Capabilities Certification Office (UCCO) under the DISN Program Office (NSP). The UC APL is to be the single approving authority for all Military Departments (MILDEPs) and DoD agencies in the acquisition of communications equipment that is to be connected to the

Defense Information Systems Network (DISN) as defined by the Unified Capabilities Requirements (UCR). In accordance with CJCSI 6211.02D, DEFENSE INFORMATION SYSTEMS NETWORK (DISN) RESPONSIBILITIES, 24 January 2012, ENCLOSURE B. POLICY, Para 1.c. (4): "CC/S/As shall procure or operate UC products listed on the DOD UC Approved Products List (APL), as applicable, unless granted an exception to policy IAW DODI 8100.04."

#### 14 BACKGROUND INVESTIGATIONS FOR CONTRACTOR PERSONNEL.

#### 14.1 BACKGROUND.

When applicable, Contractor personnel performing services under this contract, task order shall be required to undergo a background investigation. Task Orders may require Contractor personnel to have access to Unclassified Sensitive information in accordance with DoDD 8500.01E, DoDI 8500.2, AR-25, and the Privacy Act of 1974 (Public Law 93-579). At a minimum, some CONUS and OCONUS Task Orders will require the Contractor personnel accessing this information to have a favorable National Agency Check (NAC) and/or a DoD Secret clearance (Interim Secret clearances are acceptable). Investigative packages may contain the following forms:

- 1. SF-85, Questionnaire for Non-Sensitive Positions;
- 2. SF-85P, Questionnaire for Public Trust Positions;
- 3. SF-86, Questionnaire for National Security Positions;
- 4. Credit Report Release Form; and
- 5. FD-258, Fingerprint Card.

#### 14.2 NAC FILE RECORDS.

- a. The Contractor shall take the necessary steps to ensure the ability to timely respond to the Task Orders stating a requirement for a NAC or DoD Secret clearance. When a Task Order specifically addresses a requirement for a NAC, the Contractor personnel assigned to this effort shall complete a Standard Form 85 or 85P. When a Task Order specifically addresses a requirement for a DoD Secret clearance, the Contractor personnel assigned to this effort shall complete a Standard Form 86.
- b. The completed paperwork shall be submitted to the Contractor Security Manager for review of completeness. The Contractor Security Manager shall obtain a DoD Secret clearance from the Defense Security Service (DSS) or from the appropriate Government agency. The Contractor shall maintain a record of all requested NAC and DoD Secret clearance approvals and disapprovals.

# 14.3 CONTINUED PERFORMANCE DURING SUPPORT OF CRISIS SITUATIONS, CONTINGENCY OR EXERCISE.

The Contractor shall provide continued performance during support of crisis situations, contingency or exercise in accordance with the paragraph entitled "Continued Performance During Support of Crisis Situations, Contingency or Exercise" in Section H of the RFP.

#### 15 ORGANIZATION CONFLICT OF INTEREST (OCI).

#### 15.1 NON-DISCLOSURE AGREEMENT (NDA).

- a. Without exception, all contractors are required to report potential OCI issues to the Contracting Officer immediately regardless of the stage of the acquisition/contract/order (e.g. Pre-solicitation, pre-award, post award, etc.) and regardless of what provisions and clauses are provided for in the contract/order. The cognizant Contracting Officer will provide the specific certificate of non-disclosure and or requirement for a mitigation plan when applicable.
- b. The Contractor agrees that if it gains access to proprietary data of other companies, it will protect such data, and it will not use such proprietary data in supplying systems or components in future competitive procurements (FAR 9.505-4). In addition, the Contractor agrees to protect the proprietary data and rights of other organizations disclosed to the Contractor during performance of this Contract with the same caution that a reasonably prudent Contractor would use to safeguard highly valuable property. The Contractor also agrees that if it gains access to the

proprietary information of other companies that it will enter into an agreement with the other companies to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

#### 16 ANTI-TERRORISM / OPERATIONS SECURITY REQUIREMENTS

Each task/delivery order on this contract may have different requirements resulting in different considerations for AT/OPSEC, etc. The AT/OPSEC coversheet may be included at each task/delivery order, except for supply contracts under the simplified acquisition level threshold (\$150,000 for non-contingency), field ordering officer actions, and Government purchase card purchases. All items listed below are included in the basic requirements of the PWS except for number six (6), whereas individual OPSEC Standing Operating Procedure/Plan may be required for specific task orders depending on the AT/OPSEC requirements.

- 1. AT Level I Training. All contractor employees, to include subcontractor employees, requiring access Army installations, facilities and controlled access areas shall complete AT Level I awareness training within 14 calendar days after contract start date or effective date of incorporation of this requirement into the contract, whichever is applicable. The contractor shall submit certificates of completion for each affected contractor employee and subcontractor employee, to the COR or to the contracting officer, if a COR is not assigned, within 14 calendar days after completion of training by all employees and subcontractor personnel. AT level I awareness training is available at the following website: <a href="https://atlevel1.dtic.mil/at">https://atlevel1.dtic.mil/at</a>.
- 2. Access and General Protection/Security Policy and Procedures. Contractor and all associated sub-contractors employees shall comply with applicable installation, facility and area commander installation/facility access and local security policies and procedures (provided by government representative). The contractor shall also provide all information required for background checks to meet installation access requirements to be accomplished by installation Provost Marshal Office, Director of Emergency Services or Security Office. Contractor workforce must comply with all personal identity verification requirements as directed by DOD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any individual facility or installation change, the Government may require changes in contractor security matters or processes.
- 3. AT Awareness Training for Contractor Personnel Traveling Overseas. This training is required for US based contractor employees and associated sub-contractor employees to make available and to receive government provided area of responsibility (AOR) specific AT awareness training as directed by AR 525-13. Specific AOR training content is directed by the combatant commander with the unit ATO being the local point of contact.
- 4. iWATCH Training. The contractor and all associated sub-contractors shall brief all employees on the local iWATCH program (training standards provided by the requiring activity ATO). This local developed training will be used to inform employees of the types of behavior to watch for and instruct employees to report suspicious activity to the COR. This training shall be completed within 30 calendar days of contract award and within 30 calendar days of new employees commencing performance with the results reported to the COR NLT 45 calendar days after contract award.
- 5. Contractor Employees Who Require Access to Government Information Systems. All contractor employees with access to a government info system must be registered in the ATCTS (Army Training Certification Tracking System) at commencement of services, and must successfully complete the DOD Information Assurance Awareness prior to access to the IS and then annually thereafter.
- 6. For Task Orders that Require an OPSEC Standing Operating Procedure/Plan. The contractor shall develop an OPSEC Standing Operating Procedure (SOP)/Plan within the timeframe specified in the individual order, to be reviewed and approved by the responsible Government OPSEC officer, per AR 530-1, Operations Security. This SOP/Plan will include the government's critical information, why it needs to be protected, where it is located, who is responsible for it, and how to protect it. In addition, the contractor shall identify an individual who will be an OPSEC Coordinator. The contractor will ensure this individual becomes OPSEC Level II certified per AR 530-1.

- 7. For Contracts that Require OPSEC Training. Per AR 530-1, Operations Security, new contractor employees must complete Level I OPSEC training within 30 calendar days of their reporting for duty. All contractor employees must complete annual OPSEC awareness training.
- 8. For Information assurance (IA)/information technology (IT) training. All contractor employees and associated sub-contractor employees must complete the DoD IA awareness training before issuance of network access and annually thereafter. All contractor employees working IA/IT functions must comply with DoD and Army training requirements in DoDD 8570.01, DoD 8570.01-M and AR 25-2 within six months of employment.
- 9. For information assurance (IA)/information technology (IT) cortication. Per DoD 8570.01-M , DFARS 252.239.7001 and AR 25-2, the contractor employees supporting IA/IT functions shall be appropriately certified upon contract award. The baseline certification as stipulated in DoD 8570.01-M must be completed upon contract award.
- 10. For Contractors Authorized to Accompany the Force. DFARS Clause 252.225-7040, Contractor Personnel Authorized to Accompany U.S. Armed Forces Deployed Outside the United States. The clause shall be used in solicitations and contracts that authorize contractor personnel to accompany US Armed Forces deployed outside the US in contingency operations; humanitarian or peacekeeping operations; or other military operations or exercises, when designated by the combatant commander. The clause discusses the following AT/OPSEC related topics: required compliance with laws and regulations, pre-deployment requirements, required training (per combatant command guidance), and personnel data required.
- 11. For Contract Requiring Performance or Delivery in a Foreign Country, DFARS Clause 252.225-7043, Antiterrorism/Force Protection for Defense Contractors Outside the US. The clause shall be used in solicitations and contracts that require performance or delivery in a foreign country. This clause applies to both contingencies and non-contingency support. The key AT requirement is for non-local national contractor personnel to comply with theater clearance requirements and allows the combatant commander to exercise oversight to ensure the contractor's compliance with combatant commander and subordinate task force commander policies and directives.
- 12. For Contracts That Require Handling or Access to Classified Information. Contractor shall comply with FAR 52.204-2, Security Requirements. This clause involves access to information classified "Confidential," "Secret," or "Top Secret" and requires contractors to comply with— (1) The Security Agreement (DD Form 441), including the National Industrial Security Program Operating Manual (DoD 5220.22-M); any revisions to DOD 5220.22-M, notice of which has been furnished to the contractor.

#### 17 LIST OF DELIVERABLES

CDRL/Deliverable #	Title	PWS Reference / Description	Due
A0001	DD1494	3.3.5	No later than 30 calendar days after issuance of the Contract effective date specified in the contract award.
B0001	Monthly Asset Management Report (MAMT)	7.2.3	No later than the 10 <sup>th</sup> business day of the Month
C0001	Points of Contact	7.1.1	Award plus 10 workdays
C0002	Points of Contact – Changes	7.1.1	Five (5) workdays from change in Point of Contact
D0001	Management Plan	7.2	No later than 30 calendar days after issuance of the Contract effective date specified in the contract award.

CDRL/Deliverable #	Title	PWS Reference / Description	Due
D0002	Management Plan with Government Comments	7.2	No later than 10 workdays following Government comment
E0001	Project Progress Reviews	7.2.2	Initial PPR will occur no later than 90 calendar days after the Contract effective date specified in the contract award. Monthly Thereafter for the next twelve months.  Quarterly thereafter, for the life of the Contract  PPR Agenda is due no later than five (5) workdays prior to PPR  PPR Briefing is due no later than three (3) workdays prior to PPR  PPR Minutes are due no later than five (5) workdays following PPR  PPR Minutes Distribution is to be posted to web site no later than five (5) workdays following Government approval
F0001	Configuration Management Plan	7.3.1	No later than 30 calendar days after contract award
N/A	Changes and Modifications	7.3.2	Change requests submitted no later than 45 calendar days prior to implementation
G0001	Monthly Equipment and Service Report (MESR)	7.5	Submitted no later than 10 calendar days after the end of each calendar month
N/A	Web Site	8.1.2	No later than 60 calendar days after contract award.
H0001	Warranty On-Call Procedures	8.6	No later than three (3) workdays after notification
J0001	TES Trip Report	10.1.3	No later than five (5) workdays after completion of each trip

CDRL/Deliverable #	Title	PWS Reference / Description	Due
K0001	Ordering Catalog	Section 12	Draft Ordering Catalog is due no later than 30 calendar days after issuance of the Contract effective date specified in the Notice to Proceed Initial Ordering Catalog is due no later than 90 calendar days after issuance of the Contract effective date specified in the Notice to Proceed Ordering Catalog Updates, change pages are due later than five (5) workdays after approved change

# **Attachment 1 – RESERVED**

# **Attachment 2 – AIT-V Labor Category Descriptions**

**Project Manager:** The Contractor's AIT-V Project Manager shall serve as primary manager of large projects and shall be responsible for management, performance, and completion of major projects, as defined by the individual Task Order. The Project Manager shall be responsible for formulating and enforcing work standards, assigning schedules, and reviewing work performed for Task Orders.

Software Systems Engineer: Applies business process improvement practices to reengineer methodologies/principles and business process modernization projects. Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis and modern business methods and performance measurement techniques. Assist in establishing standards for information systems procedures. Develops and applies organization-wide information models for use in designing and building integrated, shared software and database management systems. Constructs sound, logical business improvement opportunities consistent with corporate Information Management guiding principles, cost savings, and open system architecture objectives. Provides daily supervision and direction to staff.

**Programmer / Analyst:** Analyzes functional business applications and design specifications for functional activities. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Tests, debugs and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to programmers to ensure program deadlines are met.

**Senior Programmer:** Analyzes functional business applications and design specifications for functional activities. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Tests, debugs and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to programmers to ensure program deadlines are met.

Systems Analyst: Analyzes and develops computer software possessing a wide range of capabilities, including numerous engineering, business and records management functions. Develops plans for automated information systems from project inception to conclusion. Analyzes user interfaces, maintain hardware and software performance tuning, analyze workload and computer usage, maintain interfaces with outside systems, analyze downtimes, analyze proposed system modifications, upgrades and new COTS products. Analyzes the problem and the information to be processed. Defines the problem, and develops system requirements and program specifications, from which programmers prepare detailed flow charts, programs, and tests. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions.

**Junior Programmer:** Participates in the design of software tools and subsystems to support reuse and domain analysis. Assists Applications Engineer and Applications Programmer to interpret software requirements and design specifications to code and integrate and test software components.

**Systems Engineer:** Analyzes and studies complex system requirements. Designs software tools and subsystems to support software reuse and domain analyses and manages their implementation. Manages software development and support using formal specifications, data flow diagrams, other accepted design techniques and Computer-Aided Software Engineering (CASE) tools. Estimates software development costs and schedule. Reviews existing programs and assists in making refinements, reducing operating time and improving current techniques. Supervises software configuration management.

<u>Data Communications / Network Specialist:</u> Analyzes network characteristics (e.g., traffic, connect time, transmission speeds, packet sizes and throughput) and recommends procurement, removals and modifications to network components. Designs and optimizes network topologies and site configurations. Plans installations,

transitions and cut-overs of network components and capabilities. Coordinates requirements with users and suppliers.

**RF Technical Radio Specialist**: Focuses on the design and implementation of AIT-V system. The individual will organize and configure the installation of an AIT-V site. This includes the proper RF installation of AIT-V readers, antennas, and printers. Identifies the proper location for the readers at the prescribed distances along the supply chain; on conveyors, at loading dock portals, near palletizers, and mounted on vehicles. Also properly deploy handheld readers for use in warehouses, distribution centers, and field environments. Be able to identify the physical and Attachment 1 (Continued)

RF environments, as well as throughput, speed and accuracy requirements. Required to be able to analyze the RF environment to identify any RF interference and take proper measures to avoid RF interference.

<u>Technical Writer</u>: Assists in collecting and organizing information required for preparation of user's manuals, training materials, installation guides, proposals, and reports. Edits functional descriptions, system specifications, user's manuals, special reports, or any other customer deliverables and documents.

**Technical Training Specialist.** Conducts the research necessary to develop and revise training courses. Develops and revises these courses and prepares appropriate training catalogs. Prepares instructor materials (course outline, background material, and training aids). Prepares student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops and seminars.

Instructional Design and Development Specialist. Under minimal direction, conducts needs analysis of groups, processes, or products to identify performance requirements of training and curricula to insure effectiveness in achieving desired training results and meet mission objectives. Analyzes, delivers, and evaluates training and support materials. Assures delivery of training courses supporting specific customer needs. Enhances customer satisfaction and loyalty by assisting in the definition, implementation, rollout, marketing, and continual evaluation of the program. Provides consulting services to customer on all program aspects to include program development, organizational readiness, and marketing strategies. Manage implementation/deployment projects for new and upgraded products and services. Coordinates interaction between government and contractor to support and enhance client program initiatives, quality assurance, and problem resolution. Contributes directly to the building of customer goodwill, satisfaction, and loyalty. Facilitates defining/enhancing the client's business needs, goals, success criteria, and program strategy. Demonstrates excellent teamwork and strategic partnership skills and abilities."

# Attachment 3 – DD 254, Department Of Defense Contract Security Classification Specifications

#### 1. CLEARANCE AND SAFEGUARDING DEPARTMENT OF DEFENSE FACILITY CLEARANCE REQUIRED CONTRACT SECURITY CLASSIFICATION SPECIFICATION (The requirements of the QoD Industrial Security Manual apply to all security aspects of this effort.) 2. THIS SPECIFICATION IS FOR: (X ancf complete as applicable) 3. THIS SPECIFICATION IS: (X and complete as applicable) a. PRIME CONTRACT NUMBER DATE (YYYYMMDD) a. ORIGINAL (Complete date In all cases) TBD 20131127 b, SUBCONTRACT NUMBER REVISED DATE (YYYYMMDD) REVISION O. (Supersedes all previous specs) DUE DATE (YYYYMMDD) DATE (YYYYMMDD) c. SOLICITATION OR OTHER NUMBER c. FINAL (Complete Item 5 in all easEls) 4, IS THIS A FOLLOW-ON CONTRACT? 2UYES NO. IfYes, complete the following: Classified material received or generated under W91QUZ-09-D-0041 to 0045 (Preceding Contract Number) Is transferred to this follow-on contract L.25.J NO. If Yes, complete the following: 5. IS THIS A FINAL DO FORM 254? L JvES retention of the classified material is authorized for the period of In response to the contractor's request dated 6. CONTRACTOR (Include Commert:ial and Government £nffty (CAGE:) Code) a, NAME, ADDRESS, AND ZIP CODE b. CAGE CODE c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Cocfe) **TBD** Contractor to be identified in the individual order CSO will be identified in the individual order 7. SUBCONTRACTOR a. NAME, ADDRESS, AND ZIP CODE b. CAGE CODE c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) If Applicable, to be identified in the individual order **TBD** CSO will be identified in the individual order 8. ACTUAL PERFORMANCE a. LOCATION b. CAGE CODE c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) **TBD** Site identified in the individual order CSO will be identified in the individual order 9. GENERAL IDENTIFICATION OF THIS PROCUREMENT Automatic Identification Technology V (AIT-V) for the Product Director (PD) Automated Movement & Identification Solutions (AMIS). Acquisition of AIT hardware, software, and technical engineering services for DoD, U.S. Government, and authorized foreign government sites worldwide. 11.1N PERFORMING THIS CONTRACT, THE CONTRACTOR WILL: 10. CONTRACTOR WILL REQUIRE ACCESS TO: 'f XC'f8 · S FACILITY OR 'JC'I?IOOJ f' ef J MU;K a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION RECEIVE CIASSIFIED DOCUMENTS ONLY b. RESTRICTED DATA CRITICAL NUCLEAR WEAPON DESIGN INFORMATION FCFIVE AND GENERATE CIASSIFIED MATERIA FORMERLY RESTRICTED DATA ,MODIFY, OR STORE CIASSIFIED HARDWARE INTELLIGENCE INFORMATION g/5W& .i.Wo tlr fc'i(fs F> (1) SensiUve Compartmented Information (SCI) g. M.Pl ?(l'Wd'&lPo¥ h REQUIRE À COMSEC ACCOUNT SPECIAL ACCESS INFORMATION HAVE TEMPEST REQUIREMENTS HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENT h. FOREIGNGOVERNMENT INFORMATION LIMITED DISSEMINATION INFORMATION OTHER (Specify) FOR OFFICIAL USE: ONLY INFORMATION k. OTHER (Specify) 1. Eligibility for assignment to ADP I, II, III (IT-1, IT-2 and IT-3) positions.

AIS Security Requirements (See Item 13)

12. PUBLIC RELEASE. Any Information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Influence of the Influence
Product Director, Automated Movement & Identification Solutions (PD AMIS) 200 Stovall Street
Alexander, VA 22332
to the Directorate for rreedom of information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs)• for review. 'in the case of norDoD User Agencies, requests for disclosure shall be submitted to that agency,
13. SECURITY GUIDANCE. The security classification guidance needed for this classified effort is identified below. If any difficulty Is encountered In applying this guidance or if any other contributing factor Indicates a need for changes In this guidance, the contractor Is authori ed and encouraged to provide recommended changes: to challenge the guidance or the classification assigned Ia any Information or materialfurnished or generated under this contract: and to submilany questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shalt be handled and protected at the highest level of classification assigned or recommended. (Pi/lin as appropriate for the classified effort. Attach, or forward under separate co"espondence, any documents/guides/extracts referenced11erein. Add additional pages as needed to provide completiJ guidance.)
This DD254 details the scope of classified work that may be perfonned under individual delivery/task orders.
However, this does not authorize classified work to be perfonned. Individual classified orders shall contain aDD Fonn 254 outlining the level of classification and instructions applicable to the individual order.
Specific instructions will be provided with each order.
10g. Access to NATO information requires a final U.S. Government clearance and special briefings. ISS Representative wilt Provide contractor NATO briefing confinnation.
IOj. Safeguarding "FOR OFFICIAL USE ONLY" (FOUO) information, Appendix F.
11a. Access to classified material will be at another contractor's facility or Government facility. Contractor has no storage capability. Contract or subcontract perfonnance is restricted to approved Contractor and DoD organizations with appropriate level of safeguarding. Using contractor or activity will provide security classification guidance for performance of this contract or subcontract.
IIf. The classified information will be located in Alexandria, VA. All applicable provisions of DoD 5220.22M (NISPOM) apply.
14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, In addition to ISM requirements, are established for this contract  Yes No  (If Yes, Identify the perlinent contractual clauses in the contract document itself. or provide an appropriate statement which identifies the ar:fdl'iroiiil requirements. Provide a copy of the requirements to the cognizant security office. Use //em 13 if additional space is needed.)
15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office
The SCO is relieved of all responsibility. Responsibility for inspection will be assigned to the SCO for each Government Site where contract perfom1ance is specified in the individual order.
16.CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified
information to be released or generated under this classified effort, All questions shall be referred to the official named below.  a. TYPED NAME OF CERTIFYING OFFICIAL  b. TITLE  c. TELEPHONE (Include Area Code)
JANICE KOZMA JAM/SECURITY 545-2983

# **Attachment 4 – Army Information Assurance (IA) Letter to Industry**



#### DEPARTMENT OF THE ARMY OFFICE OF THE SECRETARY OF THE ARMY 107 ARMY PF.NTAGON WASHINGTON DC 20310-0107

July 31, 2008

Letter to Industry

SUBJECT: Letter to Industry Concerning the Approval and Acquisition of Information Assurance (IA) Tools and Products in the United States Army.

#### 1. References:

- a. Memorandum, NETCOM, NETC-EST-1, June 5, 2008 subject: Letter to Industry Concerning the Approvaland Acquisition of Information Assurance (IA) Tools and Products in the United States Army
  - b. DoDD 8500.01E, Information Assurance, 23 April 2007
  - c. DoDI 8500.2, Information Assurance (IA) Implementation, 6 February 03.
- d. Memorandum, CIOIG-6, SAIS-IOE, 5 November 03, subject: Army Implementation of DoD Internet Protocol Version 6 (1Pv6) Mandate.
- e. AR 381-11, Production Requirements and Threat Intelligence Support to the U.S. Army, 28 June 00.
- f. Federal Information Processing Standard (FIPS) 140-2, Security Requirements for Cryptographic Modules, 25 May 01; with change notices 3 December 2002.
- g. National Security Telecommunications and Information Systems Security Policy Number 11 (NSTISSP-11), National Policy Governing the Acquisition of Information Assurance (IA) and !A-Enabled Information Technology (IT) Products, Jun 03.
  - h. DoDI 8520.2, Public Key Infrastructure (PKI) and Public Key Enabling, 1 April 2004
  - i. AR 25-2, Information Assurance, 24 October 2007.
- j. Joint Memorandum, DoD DCIO / USD (ATL) / Vice Director C4 Systems (Joint Staff), 22 December 04, subject: Department of Defense Information Technology Standards Registry Baseline Release 04-2.0.
- k. Assistant Secretary of Defense (ASD Nil) Memorandum, subject: Use of Commercial Wireless LocalArea Network (WLAN) Devices, Systems, and Technologies in the Department of Defense (DoD) Global Information Grid (GiG), 2 June 06
- 2. This letter supersedes reference **I**(a).

SUBJECT: Approval and Acquisition of Information Assurance Tools

#### 3. Guidance:

- a. The purpose of this letter is to provide industry guidance for what requirements must be met to place an IA or !A-enabled tool on the Army Information Assurance Approved Products List (IA-APL). This letter predominately contains mandated Federaland DoD requirements in addition to a limited number of Army requirements.
- b. The Army has directed Army organizations to only buy \( \bar{\textsf{A}}\) and !A-enabled products that are listed on the Army IA-APL and are on the Project Director, Computer Hardware and Enterprise Software Solutions (PO CHESS) contracts.
- c. This letter provides guidance for the future approval and acquisition of all IA tools used in the Army for strategic, operational, or tactical networked environments. Currently the categories of IA tools on the IA-APL include, but are not limited to, firewalls, intrusion detection systems (IDS), intrusion prevention systems (IPS), network assessment tools (vulnerability scanners), Virtual Private Networks (VPNs), encryption, purge, secure configuration remediation management system (patch/remediation), Defense Information Assurance Certification and Accreditation Process (DIACAP), data at rest, network data storage security systems, management consoles, spillage tools, security proxies, integrated security solutions, and network access protection/network access control tools. The remainder of this Letter to Industry provides the Federal, DoD and Army requirements for placing a toolon the Army IA-APL.
- 4. Department of Defense Laboratory Evaluation: All IA or !A-enabled tools shall have a favorable accredited DoD lab evaluation. This is separate from the National Information Assurance Partnership (NIAP) Common Criteria Evaluation and Validation Scheme (CCEVS), or the International Common Criteria for Information Security Technology Evaluation Recognition Arrangement (CCRA) requirement in references 1c and 1g. Contact OIA&C for a listing of accredited DoD laboratories. The DoD lab must evaluate all functions of the tool separately and then perform a final evaluation with all the functions "activated". Partialevaluations will not be accepted for multi-component products. Before an accredited DoD lab can evaluate an IA or !A-enabled tool, the IA or !A-enabled tool shall have a contract with a NIAP CCEVS or CCRA lab, and a current FIPS certificate. A FIPS 140-2 Level 2 certification is required for all encryption modules regardless if the tool is an IA or !A-enabled tool. The OIA&C will adjudicate if a DoD laboratory report is favorable. It will be based upon the functionality and security of the system. If the OIA&C adjudicates a DoD laboratory report to not be favorable a meeting will be scheduled with the vendor and DoD laboratory to discuss a solution.
- 5. Foreign Ownership, Control, and Influence (FOCI)/Standard Form (SF) 328: Vendors shall complete and submit an SF 328, Certificate Pertaining to Foreign Interests, (http://www.dtic.millwhs/directives/infomgUforms/sfofforms.htm) and forward the SF 328 and any supporting artifacts to the OIA&C. Vendors must renew their filing annually and as mergers and acquisitions occur. The Chief Executive Officer (CEO), Chief Financial Officer

SUBJECT: Approval and Acquisition of Information Assurance Tools

(CFO) Chief Technology Officer (CTO) and or the Chief Information Officer (CIO) shall sign and attest to the information on the SF 328.

- 6. Integrity Statement: The Army requires the vendor to provide a letter to OIA&C stating that software code is free of viruses, malicious coding, vendor /programmer created backdoors/trapdoors (front and back). For this requirement the Army is defining malicious code as software capable of performing an unauthorized function on an information system (IS). Trapdoors will be defined, but not limited to, those passwords or processes created for engineering development, vendor-generated upgrades, emergency access, or developer convenience. Maintenance backdoors installed on software/hardware requires notification to the Army.
- 7. New Version of IA or !A-enabled Tools: The only tool version that is authorized for sale is the version that is on the IA-APL and therefore on the PO CHESS contracts. Vendors must ensure that new versions are vetted with the OIA&C to receive approval. To ensure current version approval the vendor will provide a summary of what the changes are between the current approved version and the new version. The OIA&C will determine if the changes are significant enough to require additional testing/certification. If a tool adds a new IA capabil ty the Army will direct that the new capability be tested in an accredited DoD lab as a stand allone and as an integrated component of the entire tool/appliance (see paragraph 4). If a new cryptographic module is being used then a FIPS 140-2 Level 2 certificate for the client and server must be obtained from NIST (see paragraph 14). It is in the interest of the vendor to contact OIA&C as early as possible about new version releases. This will allow OIA&C to determine if there are any additional testing/certification requirements that must be met and to facilitate placement on PO CHESS contract. A requirement for additional DoD lab testing will be based on major/significant changes to the original version or the addition of a new capability. The NIST will determine if changes to an encryption module will require a new FIPS certification. Vendors are also required to inform the OIA&C when a product is entered into an end-of-life status.
- 8. Original Equipment Manufacturers (OEMs): OEMs are not the originalmanufacturers. OEMs incorporate another manufacturer's product/function into their tool. OEMs are responsible for meeting NIST requirements. The vendor needs to provide a statement telling OIA&C if there has been any modification to the OEM and the nature of the modification. The main concern is that a major change must be tested against IA standards. If there is a change in the encryption module, NIST will decide if a new certification is required. If the OEM has been changed from the original certified state then it is important to understand the scope and nature of that change. Of particular concern is any change to the FIPS 140-2 Level 2 certified encryption module.
- 9. Crifical Vulnerabilities: If a critical vulnerability is discovered in a manufacturer's product, which is already listed on the Army IA-APL, then the product will be re-evaluated for continued use and it is expected that the manufacturer will correct/mitigate/remove the vulnerability.

NETC-EST-1

SUBJECT: Approvaland Acquisition of Information Assurance Tools

10. DoDD 8500.1E and DoDI 8500.2: The DoD documents that provide the requirements for all IA and IA-enabled tools used at all levels of the Army are DoDD 8500.1E and DoDI 8500.2 (references 1(b) and 1(c).

- 11. Internet Protocol Version 6 (1Pv6) Capable: This is a DoD mandated requirement. The Joint Interoperability Test Command (JITC) is the DoD proponent for 1Pv6 testing and certification. All Army Information Technology (IT) and National Security Systems (NSS) components being developed, procured, or acquired are required to be 1Pv6 capable and interoperable with 1Pv4 systems/capabilities (reference I (d)). In order to meet Army Technical Architecture Standards, IA tools should conform to the Internet Engineering Task Force (IETF) 1Pv6 capabilities Requests for Comments (RFC). The DoD 1Pv6 Product Profile and the 1Pv6 compatibility testing process are described at http://iitc.fhu.disa.millapllipv6.html. Vendors shall provide the OIA&C a copy of the JITC 1Pv6 Interoperability Certification for each product on the Army IA-APL or provide a letter describing the road map (with timelines and milestones) that will result in 1Pv6 certification.
- 12. Kerberos Authentication: DoD mandates that all IA or !A-enabled tools, in a windows environment, shall be enabled to use Kerberos authentication (ref 1h). IA tools currently on the Army IA-APL must be enabled to use Kerberos authentication. Kerberos authentication capability is required to implement Single Sign On (SSO) capabilities using the DoD mandated Public Key Infrastructure (PKI) certificates on the Common Access Card (CAC). DoD has authorized the use of KT PASS utility as an alternative for use in a mixed/non windows environment.

#### 13. NIAP/CCEVS or CCRA:

- a. All IA and !A-enabled tools must be evaluated and validated by NIAP CCEVS or CCRA as required by DoDD 8500.1E. The Army will accept a signed contract between the vendor and the appropriate NIAP CCEVS or CCRA lab as proof of their intent to complete the CC evaluation. The Army will not require a final Common Criteria certificate before a tool can be placed on the Army IA-APL. As per DoDI 8500.2, if a U.S. Government Protection Profile (PP) exists for a particular technology area, the IA tool shall be evaluated against the appropriate PP. If a U.S. Government PP does not exist, OIA&C will work with the vendor to determine the functional security and assurance requirements which shall be incorporated into the Security Target (ST) for evaluation. If a vendor's toolperforms multiple functions (e.g. firewall, VPN, IDS/IPS, and anti-virus) each function of that tool shall be evaluated to the appropriate level of assurance.
  - b. The vendor will provide the following information:
    - (1) Name of tool(s) under contract for evaluation
    - (2) Version of the toolbeing evaluated

SUBJECT: Approval and Acquisition of Information Assurance Tools

- (3) The robustness level the product is being certified to
- (4) Functions the toolperforms (e.g. firewall, IDS/IPS, VPN, anti-virus, etc.)
- (5) Functions being evaluated
- (6) The U.S. Government Protection Profile (PP)
- 14. Federal Information Processing Standards (FIPS) 140-2 Level 2: This applies to cryptographic modules which include hardware, software, and firmware components. The Army will not accept products that have not received a FIPS 140-2 Level 2 validated certificate nor can the product start the Army DoD testing requirement prior to the certificate being issued (see paragraph 4). All IA or !A-enabled tools using an encryption module for the protection of unclassified information shall use encryption modules that are FIPS 140-2 Level 2 certified (software/hardware/firmware modules). A copy of the FIPS certificate(s) shall be provided to the OIA&C unless it is already posted on the NIST website. Sometimes there is a significant lapse of time between the certificate being issued and the certificate being posted on the NIST website. If a version change incorporates a new encryption module, that new module must have a valid FIPS 140-2 Level2 certification. A FIPS 140-2 Level 2 certification is required for all encryption modules regardless if the tool is an IA or !A-enabled tool. Vendors must be cognizant of the need to have a certification for the client and the server.

### 15. Vendor and OIA&C Initial Meeting:

- a. As a general statement all IA and !A-enabled tools shall meet the requirements stated in this Letter to Industry and the product certification plan.
- b. Not all requirements are applicable to all IA and !A-enabled tools. To determine which requirements apply and to ensure the vendor understands the requirements; an initial kickoff meeting will be scheduled between the vendor and OIA&C so as to document and clarify the road ahead for approving a tool to be placed on the Army IA-APL and the PO CHESS contracts. After the meeting the OIA&C will provide a letter documenting the requirements, the EAL and robustness level, and the date of the Letter to Industry that was in effect at the time of the initialOIA&C and vendor meeting.
- 16. Cross Domain Solutions: Cross Domain Solutions represent a special case. Cross Domain Solutions are not listed on the Army Information Assurance Approved Product List. Please contact the Army Cross Domain Solutions Cell at 703-602-3400, DSN 332-3400 or NETCOMIA- CDSO@hgda.army.mil.

NETC-EST-1

SUBJECT: Approvaland Acquisition of Information Assurance Tools

17. The government point of contact for this letter is Mr. LeRoy Lundgren, Deputy Director, OIA&C and the SME POC is Ms. Joudi Henoud, ArmyiATools@conus.army.mil.

 $Cj)at\}_{()}, Bod$ DANIEL Q. BRADFORD

Director, Enterprise Systems

Technology Activity

# Attachment 5 – Contract Level and TO/DO Level Metrics

Metrics. Metrics shall be captured at both the IDIQ and TO/DO levels. Program Level metrics measure the success of the entire program, across all task orders issued and are stated in the basic contract. TO/DO metrics measure success against performance in a specific TO/DO, and are included in each task order. Ensure metrics are value-added, achievable, measureable, and effective in meeting end-user needs in terms of cost, schedule, performance, small business participation and customer satisfaction.

**CONTRACT** LEVEL METRICS. The Contract-Level Metrics for service level outcomes will be measured against the following metrics:

- a. <u>Metric</u>: Submittal of Deliverables and Quality of Work Contractor's work is complete, accurate, and timely.
  - 1) <u>Target Goal</u>: 99% of Monthly Performance Evaluation of Warranty Support is satisfactory.
  - 2) <u>Means of Surveillance</u>: COR conduct surveillance based on criteria in the Quality Assurance Surveillance Plan (QASP).
- b. Metric: Adherence to Government schedule.
  - 1) <u>Target Goal</u>: Schedule is met 99% of the time.
  - 2) Means of Surveillance: COR conduct surveillance and provide monthly report.
- c. Incentive/Disincentive: The extent to which a contractor has met or exceeded the contract-level metrics will be considered in each Task Order evaluation. Task Order level metrics will be proposed by the contractor and negotiated for each Task Order at the time of award of the Task Order. A Performance Requirements Summary will be provided as a part of the Performance Work Statement when the individual Task Order is completed.

#### TASK ORDER LEVEL METRICS.

Task Order level metrics will be determined by the QASP (Quality Assurance Surveillance Plan) at the order level.

# **Attachment 6 – Sample AIT-V Contract Status Report**

Current Month and Year-to-date Contract-to-date Year

CLIN	Description	Service	Quantity	Total Amt	Quantity	Total Amt	Quantity	Total Amt
0001AA	HHT-A	Army	5	\$5	10	\$10	30	\$30
		AF	1	\$1	3	\$3	30	\$30
		Navy	10	\$10	30	\$30	50	\$50
		Marine	0	\$0	5	\$5	10	\$10
		Coast Grd	0	\$0	5	\$5	10	\$10
		DLA/Other	4	\$4	5	\$5	10	\$10
		TRANSCO	2	\$10	3	\$15	10	\$10
	TOTALS		22	\$30	61	\$73	150	150
0005AA	Imager for PC Input	Army	10	\$50	20	\$100	50	\$250
		AF	0	\$0	3	\$15	10	\$50
		Navy	5	\$25	10	\$50	20	\$100
		Marine	0	\$0	0	\$0	2	\$10
		Coast Grd	0	\$0	0	\$0	0	\$0
		DLA/Other	0	\$0	5	\$25	10	\$50
		TRANSCO	0	\$0	5	\$25	10	\$50
	TOTALS		15	\$75	43	\$215	102	\$510

Note: The CLINs, Description, Quantity numbers, and Total Amounts shown above are for illustrative purposes only. The contractor may provide each of the three summaries (Current month and year, Year-to-date, and Contract-to-date) on separate worksheets of the same spreadsheet file

# Attachment 7 AIT-V Monthly Equipment and Service Report

This Attachment provides the minimum data points associated with the reporting requirements called out in Section 7.5 of the AIT V PWS. Data points shall be included with monthly reports and shown on the Contractor's web-portal to the PD AMIS. Contractors may add additional data points but shall report information in the order shown - unless otherwise agreed to by the Government COR.

	DA "
1	RA#
2	Created Date
3	Current Status
4	Agency
5	Name
6	Contact Last Name
7	Contact First Name
8	Contact Phone
9	Repair Type
10	Model
11	Serial # Received
12	Problem Description
13	Problem Resolution
14	Received Date
15	Serial # Shipped
16	Actual Ship Date
17	Abuse
18	COMPANY NAME
19	Time/Date of Call
20	Help Desk Reference #
21	Serial Number (SN)

# Attachment 8 - AIT-V Product Demonstration

## 1.0 AIT-V PRODUCT DEMONSTRATION REQUIREMENTS

- 1.1 The objective of the AIT-V Product Demonstration is to provide the Government with an opportunity to observe the Offeror's hardware and software in operation, and to familiarize the Government with the various features of the Offeror's hardware and software. The Product Demonstration will be part of the Solicitation's Evaluation.
- 1.2 Offerors are required to provide all equipment to include all materials needed to successfully demonstrate the products proposed. All equipment will be exact matches and configuration to the CLINs being proposed in the Offerors Solicitation. Any unique hardware or software customization for the purpose of the AIT-V Product Demonstration shall be disclosed to the Government representatives during the actual demonstration.
- 1.3 All communications will be limited to the demonstration. Questions outside the demonstration such as proposal status, project status, etc., will not be entertained.
- 1.4 The Offeror shall prepare an Audit List, based on the Bill of Material (L.5.1.3), illustrating the CLIN, manufacturer, make, model number, serial number, and part number of all proposed equipment (to include cables, AC Adapters, etc.) to be used in the demonstration. As the first agenda event, prior to the demonstration, the Government's team will perform an audit of the demonstration equipment for all demonstrations listed below. Offeror's personnel shall assist the Government personnel in verifying this information.
- 1.5 The Government reserves the right to take pictures of any or all equipment during the demonstration to document either the equipment involved or the procedures used in the demonstration.
- 1.6 At the conclusion of the Offeror's Demonstration, the Offeror's AIT-V hardware and software shall be made available to the Government for independent, hands-on operation and evaluation without Offeror personnel present. The Offeror shall have technical personnel available during the Government evaluation to assist Government personnel in the operation of the hardware and software if necessary and to answer questions as they may arise. This evaluation will be used to assist the Government both in determining the extent to which an Offeror's AIT-V hardware and software addresses certain requirements of the PWS as well as to provide the Government additional data to assess the value of the Offeror's proposal relevant to the evaluation criteria stated in Section M, of this RFP.
- 1.7 The Government will specify the media to be used during the Demonstration. The "density" of bar codes specified herein refers to "x" dimensions for linear bar codes and PDF 417, and to the cell width module for Data Matrix 2D symbology.

- 1.8 All AIT-V Product Demonstrations shall be attempted. Suspected failed equipment may be replaced during a demonstration, however, the demonstration shall be restarted from the beginning of the particular demonstration, until it is completed as per the Demonstration Requirement.
- 1.9 The AIT-V Product Demonstrations will be conducted at a site provided by the Offeror at a location of the Offeror's own choosing within a 30 mile radius of the PD AMIS office in Alexandria, VA.
- 2.0 DEMONSTRATION SCHEDULE. The schedule of events for the AIT-V Product Demonstrations are as follows:

8:30 a.m.	Government Arrival at Demonstration Site / Sign In
8:30 – 8:45 a.m.	Introductions
8:45 – 9:00 a.m.	Government Audit
9:00 a.m. – 1:00 p.m.	Offeror's Demonstrations
1:00 – 1:30 p.m.	Break
1:30 – 2:30 p.m.	Government's Independent Examination
2:30 – 3:30 p.m.	Offeror's Clarification/Follow-up {if required}
3:30 p.m.	Conclusion

# 3.0 REQUIRED DEMONSTRATIONS

3.1 Stationary Bar Code Printers, Desktop Verifier for Labels, and Bar Code Label Design and Printing Software

CLIN	Products
0005BA	Stationary Bar Code Label Printer
0005BB	Stationary Bar Code Label Printer, with Installed Take-Up Reel
0005BC	Roll of 4" by 6" Synthetic Label Stock
0005BD	Roll of 4" by 3" Synthetic Label Stock
0005BE	Resin Ribbon for 4" Width Labels
0007AC	Desktop Verifier for Labels
0013AA	Bar Code Label Design and Printing Software

Offeror furnished equipment (not on contract):

- Direct Thermal Label stock, for Stationary Bar Code Label Printer (0005BA)
- Pre-printed Label with Data Matrix Symbology with 7.5 mil cell dimension using a 50-character alphanumeric data string, non IUID compliant (Artifact 1)

- High Contrast Data Plates manufactured with Laser Marking Equipment (0007AA). Data plates are to be IUID compliant. One plate to be at 7.5 mil cell dimension (Artifact 2) and one at 10 mil cell dimension (Artifact 3).
- Dot-Peen IUID compliant data plate (Artifact 4).
- Computer
- 3.1.1 Demonstrate functionality of the diagnostic display and the keypad features on Stationary Bar Code Label Printer (0005BA) and Stationary Bar Code Label Printer, with Installed Take-Up Reel (0005BB) (if different).
- 3.1.2 With Bar Code Label Design and Printing Software (0013AA), print form DD1348 with Offeror populated data on Stationary Bar Code Label Printer (0005BA) using Roll of 4" by 6" Synthetic Label Stock (0005BC) (thermal transfer) and Resin Ribbon for 4" Width Labels (0005BE). Retain label for later demonstrations (Artifact 5).
- 3.1.3 Change printer label stock to Direct Thermal, demonstrate any adjustments required, and using Bar Code Label Design and Printing Software (0013AA) print form DD1387 with Offeror populated data on Stationary Bar Code Label Printer (0005BA). Retain label for later demonstrations (Artifact 6).
- 3.1.4 Change label stock to Roll of 4" by 3" Synthetic Label Stock (0005BD), install Resin Ribbon for 4" Width Labels (0005BE), and demonstrate automatic label size sensing. Utilizing Bar Code Label Design and Printing Software (0013AA), design and print a bar code label containing a Data Matrix bar code with 10 mil cell dimensions using a 50 character alphanumeric data string (Artifact 7).
- 3.1.5 Demonstrate setup and use of the Take-Up Reel on the Stationary Bar Code Label Printer, with Installed Take-Up Reel (0005BB) while printing bar code labels.
- 3.1.6 Demonstrate the functionality of the Desktop Verifier for Labels (0007AC). Verify and validate Artifacts 1, 2, 3, 4, and 7 and store each report as a file. At the conclusion of this step print each of the reports.
- 3.2 Hand Held Terminals, Portable/Wearable Bar Code Label Printer, and Separately Orderable Components

CLIN	Products
0001AA	Hand Held Barcode Terminal (HHT-A)
0001AD	HHT-A Holster and Shoulder Strap
0001AE	HHT-A Detachable Handle and Trigger (if available)
0001AF	HHT-A Rechargeable Battery
0001AH	HHT-A Single Battery Charger / Docking Station
0001AK	HHT-A Transparent Screen Protector
0001AM	HHT-A Portable Printer Interface Connection and Cable (if available)
0001AP	HHT-A Detachable CAC Reader

CLIN	Products
0001BA	Hand Held Barcode Terminal (HHT-B)
0001BD	HHT-B Holster and Shoulder Strap
0001BE	HHT-B Detachable Handle and Trigger (if available)
0001BF	HHT-B Rechargeable Battery
0001BH	HHT-B Single Battery Charger / Docking Station
0001BK	HHT-B Transparent Screen Protector
0001BM	HHT-B Portable Printer Interface Connection and Cable
0001BP	HHT-B Detachable CAC Reader
000121	THE B BOUNDINGS CITE ROUNDS
0001CA	Hand Held Barcode Terminal (HHT-C)
0001CD	HHT-C Holster and Shoulder Strap
0001CE	HHT-C Detachable Handle and Trigger (if available)
0001CF	HHT-C Rechargeable Battery
0001CH	HHT-C Single Battery Charger / Docking Station
0001CK	HHT-C Transparent Screen Protector
0001CM	HHT-C Portable Printer Interface Connection and Cable (if available)
0001CP	HHT-C Detachable CAC Reader
0001DA	Hand Held Barcode Terminal (HHT-D)
0001DD	HHT-D Holster and Shoulder Strap
0001DE	HHT-D Detachable Handle and Trigger (if available)
0001DF	HHT-D Rechargeable Battery
0001DH	HHT-D Single Battery Charger / Docking Station
0001DK	HHT-D Transparent Screen Protector
0001DM	HHT-D Portable Printer Interface Connection and Cable (if available)
0001DP	HHT-D Detachable CAC Reader
0001EA	Hand Hald Dance de Terminal (IHIT E)
	Hand Held Barcode Terminal (HHT-E)
0001ED 0001EE	HHT-E Holster and Shoulder Strap HHT-E Detachable Handle and Trigger (if available)
0001EE 0001EF	HHT-E Rechargeable Battery
0001EF 0001EH	HHT-E Single Battery Charger / Docking Station
0001EH 0001EK	HHT-E Transparent Screen Protector
0001EK 0001EM	HHT-E Portable Printer Interface Connection and Cable
0001EW 0001EN	HHT-E Detachable Hand Strap
0001EN 0001EP	HHT-E Carrying Case
0001121	Titti-E Carrying Case
0001FA	Hand Held Barcode Terminal (HHT-F)
0001FD	HHT-F Holster and Shoulder Strap
0001FE	HHT-F Detachable Handle and Trigger (if available)
0001FF	HHT-F Rechargeable Battery
0001FH	HHT-F Single Battery Charger / Docking Station
0001FK	HHT-F Transparent Screen Protector
0001FM	HHT-F Portable Printer Interface Connection and Cable
0001FN	HHT-F Detachable Hand Strap
0001FP	HHT-F Carrying Case
	, <i>U</i>

CLIN	Products
0005AA	Portable/Wearable Bar Code Label Printer
0005AD	Carrying Case with Strap for Portable/Wearable BC Label Printer
0005AE	4" x 6" Label and Ribbon Set for Portable/Wearable BC Label Printer

Offeror furnished equipment (not on contract):

- Direct Thermal Label Stock for Portable/Wearable Bar Code Label Printer (0005AA).
- Computer.
- Pre-Printed Bar Code Label with Code 3 of 9 at 10 mil 'x' dimension (Artifact 8).
- Pre-Printed Long Distance Labels for Code 3 of 9 (Artifact 9).
- 3.2.1 Repeat the following steps 3.2.2 through 3.2.5 for each HHT.
- 3.2.2 Demonstrate use of transparent screen protector.
- 3.2.3 Show location of and describe all 'ports' and physical connections on the HHT and Single Battery Charger / Docking Station.
- 3.2.4 Demonstrate use of Shoulder Strap and Holster with HHT.
- 3.2.5 Demonstrate charging of HHT and additional battery utilizing the Single Battery Charger / Docking Station. Demonstrate removal and replacement of HHT battery.
- 3.2.6 Demonstrate HHT-A through D functionality:
  - Power on hardware.
  - Pair Bluetooth CAC Reader to HHT.
  - Transfer data file between HHT and computer utilizing Single Battery Charger / Docking Station.
  - Connect Detachable CAC Reader to HHT.
  - Transfer data file between HHT and computer utilizing Single Battery Charger / Docking Station.
  - Demonstrate attachment and use of (optional) handle and trigger (if available).
  - Demonstrate ergonomics and scanning of Artifacts 1, 2, 3, 5, 6, 7, 8.
  - Demonstrate capability to deactivate all radios.
- 3.2.7 HHT-B only additional demonstration:
  - Physically connect Portable/Wearable Bar Code Printer to HHT with Bluetooth CAC Reader and Portable Printer Interface Connection and Cable.
  - Print a sample Thermal Transfer label.
  - Physically connect Portable/Wearable Bar Code Printer to HHT with Detachable CAC Reader and Portable Printer Interface Connection and Cable.
  - Switch label stock to Direct Thermal and demonstrate any adjustments to Portable/Wearable printer to accommodate Direct Thermal printing.
  - Print a sample Direct Thermal label.

- Demonstrate removal and replacement of printer battery.
- 3.2.8 HHT-C only additional demonstration:
  - Demonstrate long distance scanning of Artifact 9 at a minimum distance of 30 feet.
- HHT-D only additional demonstration:
  - Demonstrate scanning of Artifact 4.
- 3.2.10 Demonstrate HHT-E and F functionality:
  - Power on hardware.
  - Access the HHT with CAC using integrated CAC reader.
  - Transfer data file between HHT and computer utilizing Single Battery Charger / Docking Station.
  - Demonstrate attachment and use of (optional) handle and trigger (if available).
  - Demonstrate ergonomics and scanning of Artifacts 1, 2, 3, 5, 6, 7, 8.
  - Demonstrate capability to deactivate all radios.
  - Demonstrate functionality of hot-swappable batteries.
  - Physically connect Portable/Wearable Printer to HHT with Portable Printer Interface Connection and Cable.
  - Print a sample Thermal Transfer label.
- 3.3 Imagers for PC Input

CLIN	Products
0003AA 0003AB	Imager for PC Input – General Bar Code (Tethered) Imager for PC Input – General Bar Code (Bluetooth)
0003AC 0003AD	Imager for PC Input – IUID Label Markings Imager for PC Input – IUID Direct Part Markings
0003AD 0001EA	Hand Held Barcode Terminal (HHT-E)

- 3.3.1 Demonstrate operational capability of all Imagers with HHT-E:
  - Scan Artifacts 1, 2, 3, 5, 7, 8 showing data on HHT screen.
  - Scan Artifact 2 to illustrate the substitution of printable characters for nonprintable IUID data matrix characters on the HHT screen.
- 3.3.2 Demonstrate Imager for PC Input General Bar Code (Bluetooth) (0003AB) with HHT-E:
  - Scan Artifact 2 showing data on HHT screen. Continue to scan Artifact 2 while varying the distance between the Imager and the HHT, increasing to the farthest possible distance for Bluetooth communication.

- Scan Artifacts 1, 2, 3, 5, 7, 8 outside of Bluetooth communication range and demonstrate 'store and forward' feature.
- 3.3.3 Demonstrate Imager for PC Input IUID Label Markings (0003AC) with HHT-E:
  - Scan Artifact 2 and output valid parsed IUID string to HHT screen.
- 3.3.4 Demonstrate Imager for PC Input IUID Direct Part Markings (0003AD) with HHT-E:
  - Scan Artifacts 2 and 4 and output valid parsed IUID strings to HHT screen.

## 4.0 STATIC DISPLAYS

The following equipment is to be displayed. All parts included in each CLIN are to be displayed, except as noted below. The Offeror will present a short description of the equipment, parts and ancillary items.

CLIN	Products
0009AB	Radio Frequency Access Point (NEMA)
0009AC	Radio Frequency Gateway
0011AA	Transit Case Configuration, Small Arms Room Kit (The equipment is to
	be fully integrated into a table-top configuration, the transit case and foam
	inserts are not required to support the demonstration.)